# TCD-D10PRO II

# SERVICE MANUAL

1st Edition

*US Model*
*Serial No. 10,501 and later*
*Canadian Model*

*AEP Model*
*Serial No. 10,701 and later*
*UK Model*
*Serial No. 10,851 and later*

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DIGITAL AUDIO TAPE CORDER

SONY®

3-370-700-11

# SPECIFICATIONS

## Format

| | |
|---|---|
| Tape | Digital audio tape (DAT format) |
| Head | Rotary head |
| Recording time | 120 minutes (with DT-120) |
| Tape speed | 8.15 mm/s |
| Drum rotation | Approx. 2,000 rpm |
| Error correction | Double Reed Solomon code |

## Digital audio characteristics

Number of channels
2-channel stereo
D/A conversion 16-bit linear
Frequency response
20 Hz – 22,000 Hz
(±1.0 dB, line input: +4 dBs*, line output: −10 dBs)
Signal-to-noise ratio
More than 85 dB
(line inputs, AWTD)
Dynamic range More than 85dB
(line inputs, AWTD)
Total harmonic distortion
Less than 0.06%
(1 kHz, line input: +4 dBs, line output: −10 dBs, 30 kHz LPF)
Channel separation
More than 80 dBs (1 kHz, line input
30 kHz LPF)
Wow and flutter Below measurable limit
(±0.008% W PEAK)

* 0dBs = 0.775Vrms

## Tape

| | |
|---|---|
| Track pitch | 13.6 μm (20.4 μm) |
| Sampling frequency (selected automatically) | Recording: 32 kHz, 44.1 kHz (digital inputs only), 48 kHz<br>Playback: 32 kHz, 44.1 kHz, 48 kHz |
| Modulation | 8-10 Modulation |

## Input

### Analog inputs

| INPUT SELECT switch | Rated input | Maximum input | Impedance | Connector type |
|---|---|---|---|---|
| MIC | −60 dBs | −20 dBs | 10 kilohms balanced | XLR-3-31 type |
| LINE IN | +4 dBs | +24 dBs | 47 kilohms balanced | |

MIC ATT selector → 0 dB position

Digital inputs DIGITAL I/O connector
With the supplied digital input/output cable (XLR type connectors):
AES/EBU type

## Output

### Analog outputs

| Connector | Rated output | Maximum output (at 10% distortion) | Impedance | Connector type |
|---|---|---|---|---|
| LINE OUT | −10 dBs | — | Zo 700 ohms (unbalanced) | phono jack (RCA) |
| (head phones) | — | 20 mW+20 mW | $Z_L$ 32 ohms | stereo phone jack |

Digital outputs DIGITAL I/O connector
With the supplied digital input/output cable (XLR type connectors):
AES/EBU type

## General

Power requirements
6V DC
- With the supplied NP-22H battery pack
- With the supplied ACP-88 AC pack, from 100V—240V AC, 50/60Hz

Power consumption
Approx. 7.5W
Operating temperature
+5°C to +35°C (32°F to 104°F)
Operating humidity
Less than 80% (relative humidity)
Storage temperature
−20°C to +55°C (4°F to 131°F)
Dimensions Approx. 253 × 55 × 191 mm (w/h/d)
(10 × 2 1/4 × 7 5/8 inches)
Weight Approx. 2.0 kg (4 lb 7 oz) incl. battery pack

## Supplied accessories

Remote commander (1)
Digital signal input/output cable
(XLR type connector × 2) (1)
AC pack ACP-88 (1)
Battery pack NP-22H (2)
Battery charging adaptor BC-D10 (1)
Lithium battery (as backup for the clock) CR2025 (1)
Standscrew adaptor (for microphones)
PF 1/2 → NS 5/8 (1)
PF 1/2 → W 3/8 (1)
Shoulder strap (1)
Carrying case (1)
Operation manual (1)
Service manual (1)

## Optional accessories

Battery pack NP-4000
DC pack DCP-80
Car battery cord DCC-16A
Extension cord ECD-10C
Connecting cord RK-C510KS, RK-C74
DAT cleaning cassette DT-10CL

Design and specifications are subject to change without notice.

## REPAIR CHECK POINTS AND CAUTIONS

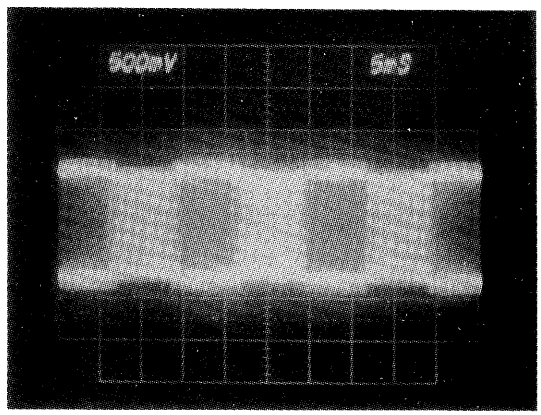
1. When the TCD-D10PRO II contains a chargeable battery, power is supplied to IC4 only. When the POWER switch is pressed, power is supplied to the LED or LCD display. When the PLAY switch is pressed, power is supplied to the MD block. These power supplies are operated by three systems.

2. For troubleshooting, put the set into test mode and check that the power clock oscillates.

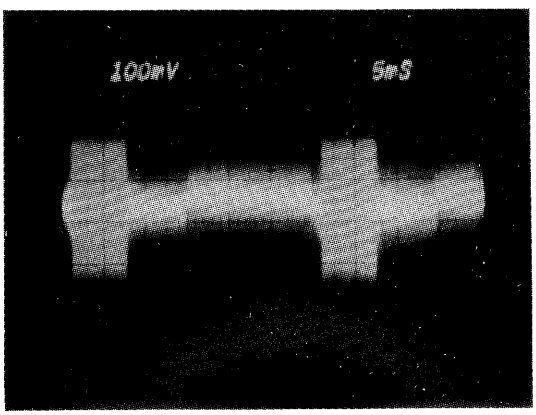
3. When power is not applied after the POWER switch is pressed, assume that power is not supplied to IC4, a reset signal(IC3)is not supplied to pin ㊽ of IC4, or the POWER switch is defective. (Power is turned on or off whenever the signal at pin ㊳ of IC4 goes low.)

4. The system is normal if the amplitude at TP529(AMP.RF)exceeds 220mVp-p when the FF button is pressed with alignment tape TY-7251 loaded in test mode while pressing the PLAY switch.
If the amplitude is less than 220mVp-p, assume that the head is dirty or the RF block is defective.

5. The RF block is normal if signal Ⓐ is sent to pin ㊻ of IC528 and signal Ⓑ exceeding 110mV is output to TP528(RF).



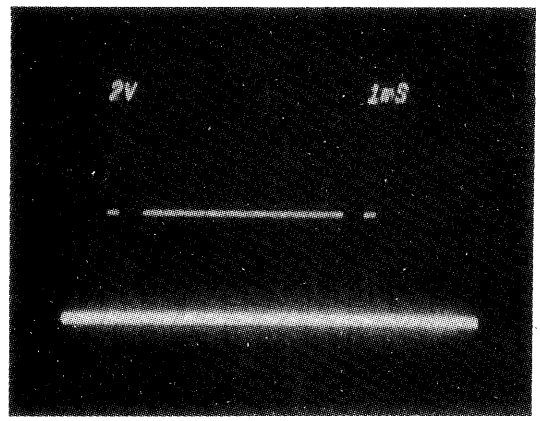

Ⓐ



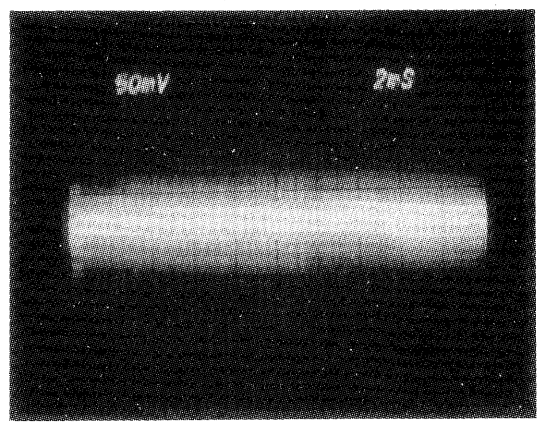

Ⓑ

6. The RF amplifier(consisting of Q533 though Q535)is defective if a signal exceeding 110mV is sent to TP528(RF)and a signal exceeding 220mV is not output to TP529(AMP.RF).
(The output ratio of TP528 and TP529 is 1 to 2.)

7. When VCO or ATF is normal, a CRC pulse Ⓒ is not output from pin ㊼ of IC520. The VCO or ATF can thus be checked using the pulse.
8. ATF is locked using IC518 when the signal at pin ⑩ of IC518 is low. When it is high, ATF is not locked.
9. The head is normal if signal Ⓓ appears when an oscilloscope is connected to the head output.

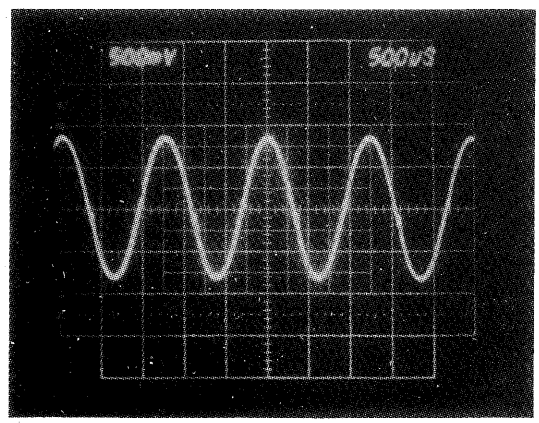



Ⓒ

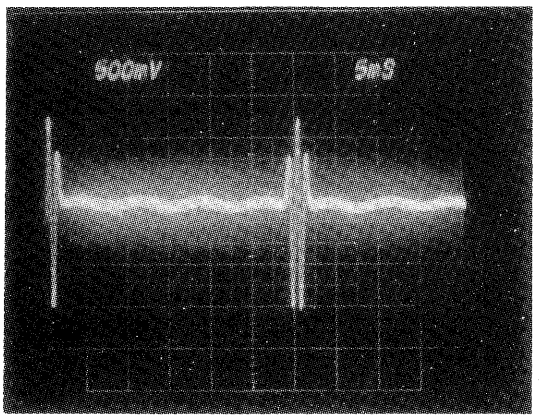



Ⓓ

10. The drum sensor is normal if drum FG signal Ⓔ (at pin ① of IC516)and drum PG signal Ⓕ (at pin ⑭ of IC516)appear as shown below.




Ⓔ




Ⓕ

11. The signal at pins ⑧ and ㉓ of IC520 goes high when the drum servo is normal.
12. An SWP signal(at pin ㊺ of IC520)is produced from a drum PG signal(pin ⑦ of IC517)and drum FG signal(at pin ① using IC520). A DPG signal(at pin ㊹ of IC520)is then produced from the SWP signal.

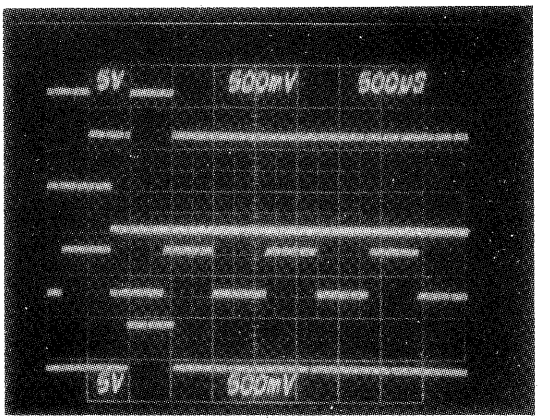
IC520

Drum PG
(at pin ⑫)

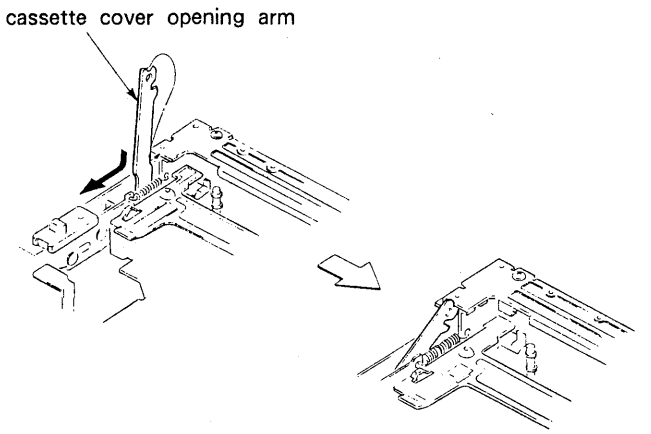
SWP
(at pin ㊺)

Drum FG
(at pin ⑪)

DPG
(at pin ㊹)



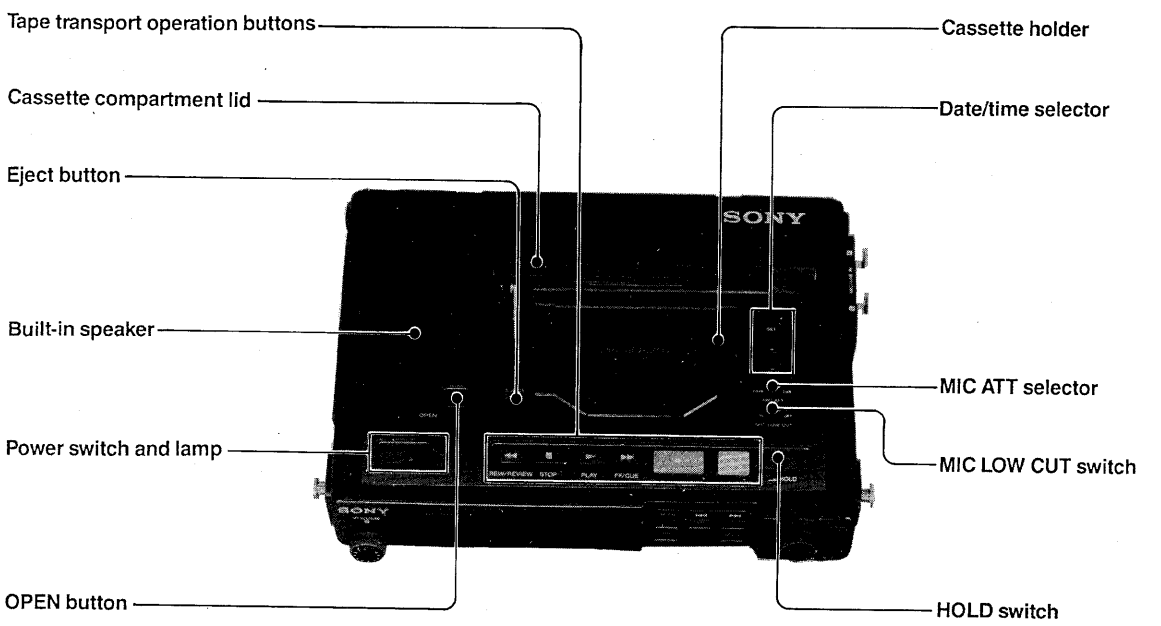

13. Cassette cannot be loaded when the TCD-D10PRO II 's cabinet is removed. The system can operate normally when the cassette cover opening arm is set after the cassette is inserted as shown in the figure below. (When the lever is not released, however, the cassette cannot be ejected.)



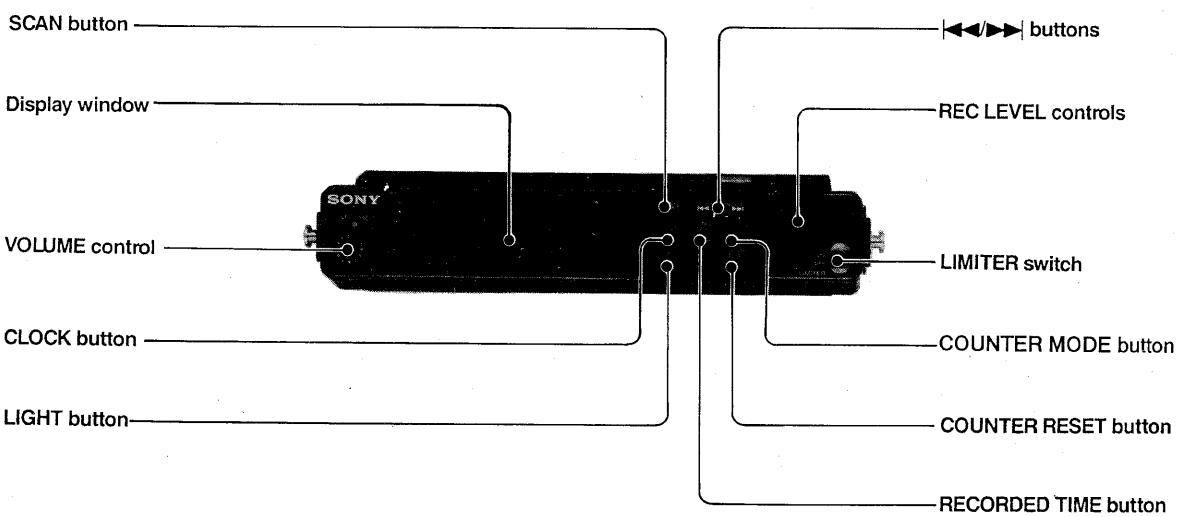
# 1. GENERAL

## LOCATION AND FUNCTION OF PARTS AND CONTROLS

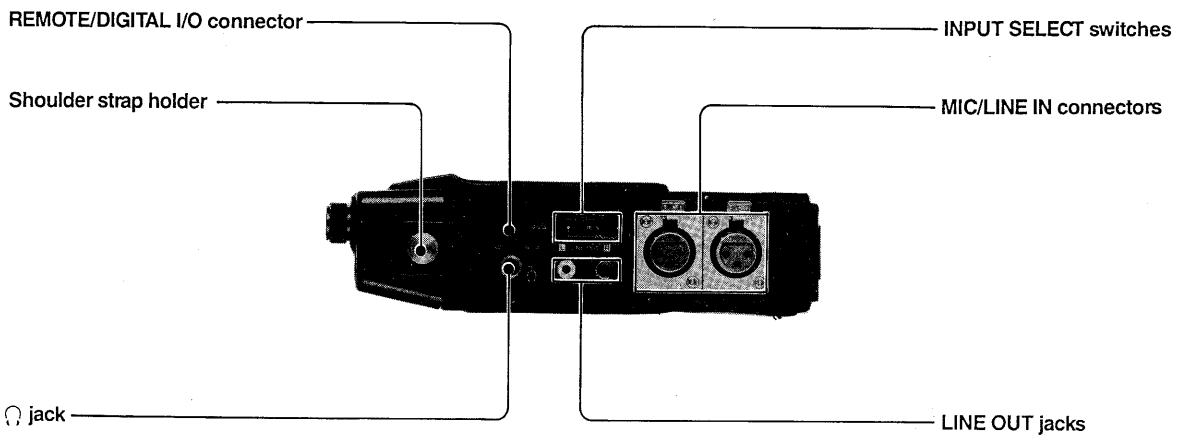
### UPPER PANEL



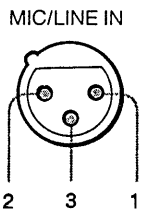

### FRONT PANEL



## RIGHT SIDE PANEL

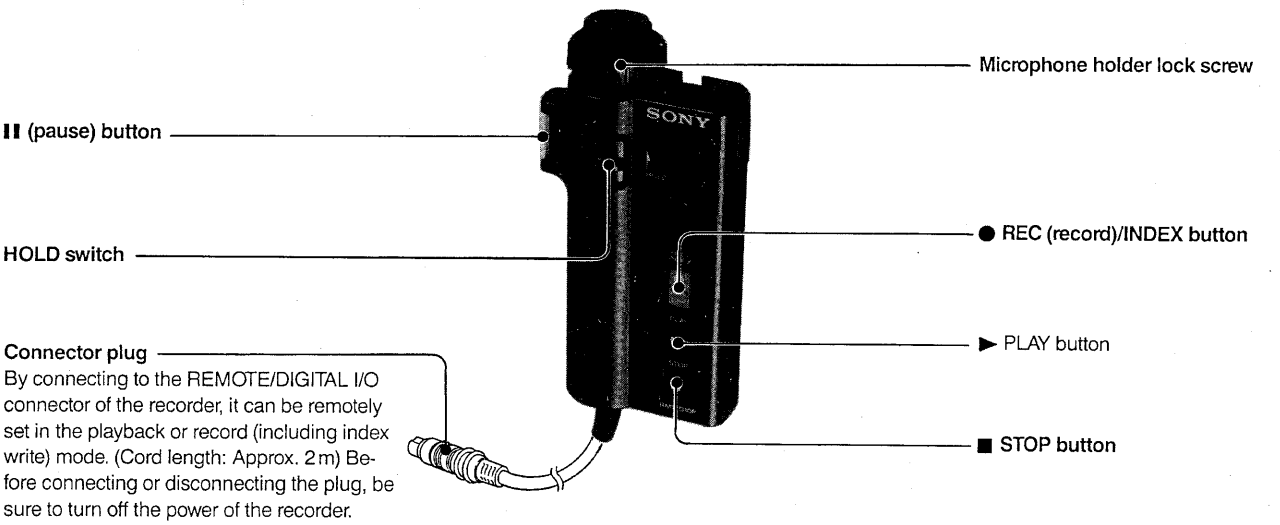



**MIC/LINE IN (microphone/line input) connectors**
(XLR-3-31 type)
Input microphone signals or line output signals from other audio equipment.
Set the MIC/LINE IN selector of the INPUT SELECT switches according to the equipment to be connected.
**Pin assignment**



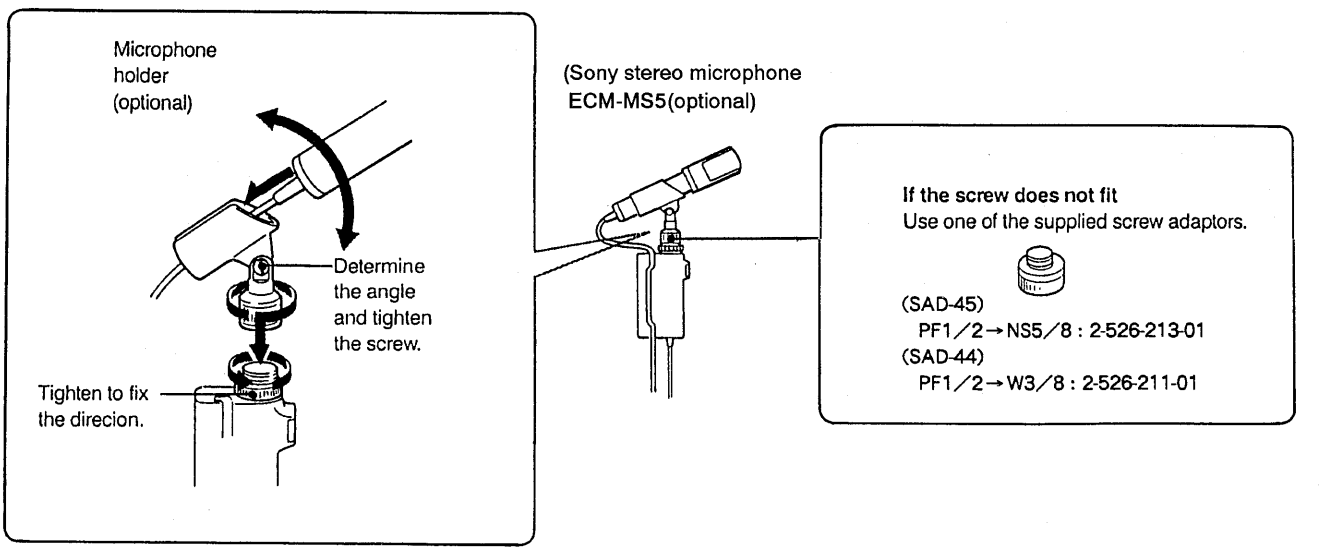

| 1:GND | 2:HOT | 3:COLD |
|---|---|---|

## REMOTE COMMANDER


Microphone holder lock screw
II (pause) button
HOLD switch
● REC (record)/INDEX button
Connector plug
By connecting to the REMOTE/DIGITAL I/O connector of the recorder, it can be remotely set in the playback or record (including index write) mode. (Cord length: Approx. 2 m) Before connecting or disconnecting the plug, be sure to turn off the power of the recorder.
► PLAY button
■ STOP button
SONY

## ATTACHING A MICROPHONE TO THE REMOTE COMMANDER

Optional microphone having a Cannon connector (XLR-3-32 or equivalent), for example, a Sony stereo microphone ECM-MS5 etc.


Microphone holder (optional)
Determine the angle and tighten the screw.
Tighten to fix the direcion.
(Sony stereo microphone ECM-MS5(optional)
If the screw does not fit
Use one of the supplied screw adaptors.
(SAD-45)
PF1/2→NS5/8 : 2-526-213-01
(SAD-44)
PF1/2→W3/8 : 2-526-211-01

## IC's PIN DESCRIPTION

### IC401 (CXA1045Q)

| Pin No. | Symbol | Description |
|---|---|---|
| 1 | POATA | PB signal output terminal. |
| 2 | NC | |
| 3 | PLIM IN | PB limiter input terminal. |
| 4 | PLIM PC | PB limiter bypass capacitor connection terminal. |
| 5 | EQ OUT | PCM equalizer output terminal. |
| 6 | LOW | Resistor connection terminal which determines the PCM equalizer's low-range characterstics. |
| 7 | HIGH | Resistor connection terminal which determines the PCM's equalizer high-range characteristics. |
| 8 | PHASE | Resistor connection terminal which determines the PCM's equalizer phase characteristics. |
| 9 | P Vcc | Power terminal for PB and control logie systems other than head amplifier limiter. |
| 10 | EQ IN | PCM equalizer input terminal. |
| 11 | NC | |
| 12 | SW OUT | Switch amplifier output terminal for output from two channels. |
| 13 | B 2ND OUT | B-CH second RF amplifier output terminal. |
| 14 | B HCTL | Resistor connection terminal which determines the B-CH PB low-pass filter's cut-off frequency. |
| 15 | A 2ND OUT | A-CH second RF amplifier output terminal. |
| 16 | A HCTL | A-CH PB low-pass filter. |
| 17 | B PC2 | B-CH second RF amplifier's bypass capacitor connector terminal. |
| 18 | REF PC | REF block bypass capacitor connection terminal. |
| 19 | NC | |
| 20 | P GND | GND terminal for PB syster other than head amplifier limiter. |
| 21 | A PC2 | A-CH second RF amplifier's bypass capacitor connection terminal. |
| 22 | B RACTL | Usually not used. |
| 23 | B RA IN | B-CH REC AMP input terminal. |
| 24 | B RLV OUT | REC limiter control's B-CH output terminal. |
| 25 | B RA OUT | B-CH REC AMP output terminal. |
| 26 | B PIN | B-CH head amplifier input terminal. |
| 27 | B PC1 | B-CH. |
| 28 | HA Vcc | Head amplifier's power terminal. |
| 29 | B HA OUT | B-CH head amplifier's output terminal. |
| 30 | HA GND | Head amplifier's GND terminal. |
| 31 | RA GND | REC amplifier's GND terminal. |
| 32 | A HA OUT | A-CH head amplifier's output terminal. |
| 33 | RA Vcc | REC amplifier's power terminal. |
| 34 | A PC1 | A-CH head amplifier's bypass capacitor connection terminal. |
| 35 | A PIN | A-CH head amplifier's input terminal. |
| 36 | A RA OUT | A-CH REC amplifier's output terminal. |
| 37 | A RLV OUT | REC limiter control's A-CH output terminal. |
| 38 | A RA IN | A-CH REC amplifier's input terminal. |
| 39 | A RACTL | Usually not used. |
| 40 | AF REC | Logie terminal to entor the after-recording mode (not used in TCD-D10). |
| 41 | RP | Control terminal to designate REC and PB modes (H: REC, L: PB, Open: L). |
| 43 | LIM GND | GND terminal for PB and REC limiter controls. |
| 44 | SAG | REC sag compensation capacitor connection terminal. |
| 45 | LIM Vcc | Power terminal for PB and REC limiter controls. |
| 46 | RDATA IN | Terminal to input recorded data to a REC limiter controls. |
| 47 | BR VOL | REC limiter control's B-CH amplitude adjustment terminal. |
| 48 | AR VOL | REC limiter control's A-CH amplitude adjustment terminal. |

**IC520(CXD1052Q)**

| Pin No. | Symbol | Description |
|---|---|---|
| 1 | 94M | Master clock input terminal (9.408MHz). |
| 2 | 128K | Servo reference input terminal (12.8kHz). |
| 3 | XCLR | Rest input terminal. Reset by low level. |
| 4 | PCOT | Capstan phase comparison output terminal. 3 state output. |
| 5 | DVS2 | Setting of voltage applied to the drum motor when servo is applied during SEARCH. |
| 6 | VSS | GND. |
| 7 | CFG | Capstan FG input terminal. |
| 8 | JTSP | Just speed monitor terminal. Set to the just speed in high level. |
| 9 | CFGO | Capstan FG output terminal. |
| 10 | DVS1 | Setting of voltage applied to the drum motor when servo is applied during SEARCH. |
| 11 | DFG | Drum FG input terminal. |
| 12 | LPG | Drum PG input terminal. |
| 13 | SPPW | Speed servo PWM output terminal. |
| 14 | PHPW | Phase servo PWM output terminal. |
| 15 | BSPW | Bias servo PWM output terminal. |
| 16 | CREF | Capstan frequency reference output terminal (unused). |
| 17 | RFDT | RF signal input terminal. (The existence of a signal is indicated by the signal being "1" or "0". The result is input to IC.) |
| 18 | RFW | RF window output terminal. The RF signal is detected by low level. |
| 19 | VDD | +5V power terminal. |
| 20 | TST1 | Test input terminal. Usually set to low. |
| 21 | TIO1 | Test output terminal. Usually set to low. |
| 22 | XC16 | Capstan mode select input terminal. Set to x16 mode by low level. |
| 23 | JSTL | Just lock monitor terminal. Just locked by high level. |
| 24 | TIN4 | Test input terminal. Usually set to low. |
| 25 | TIN1 | Test input terminal. Usually set to low. |
| 26 | ARST | Alarm cancel input terminal in SEARCH mode. Canceled by low level. |
| 27 | XDON | Drum ON/OFF select input terminal. Set to ON by low level. |
| 28 | TIN3 | Test input terminal. Usually set to low. |
| 29 | TOU3 | Test output terminal. |
| 30 | TOU3 | Test output terminal. |
| 31 | VSS | GND. |
| 32 | TIO2 | Test output terminal. Usually set to low. |
| 33 | XALM | Alarm output terminal in SEARCH mode. Alarmed by low level. |
| 34 | XVAR | External reference setting terminal (pin 2). Usuall set to high. |
| 35 | XREW | FF/REW setting terminal. Set to REW by low level. |
| 36 | XSER | SEARCH mode setting terminal. Set to SEARCH by low level. |
| 37 | DBRK | Drum brake output terminal. Brake set on by high level. |
| 38 | TOU1 | Test output terminal. |
| 39 | TOU2 | Test output terminal. |
| 40 | TIN5 | Test input terminal. Usually fixed to low. |
| 41 | DREF | Drum PG reference input terminal. |
| 42 | TST2 | Test input terminal. Usually set to low. |
| 43 | VDD | +5V power terminal. |
| 44 | DPG | Delay PG (DPG) input terminal. |
| 45 | SWP | Switching pulse output terminal. |
| 46 | PLLK | Drum lock monitor output terminal in SEARCH mode. Locked by high level. |
| 47 | CRC | CRC signal input terminal. CRC OK for high level. |
| 48 | RPCK | Reference input terminal in SEARCH mode. |

**IC518(CXA1046M)**

| Pin No. | Symbol | Description |
|---|---|---|
| 1 | RF IN | RF input terminal. |
| 2 | F CTL | External resistor connection terminal for pilot filter (LPF) characteristics. |
| 3 | B VOL | B-CH gain adjustment resistor/bypass capacitor connection terminal of gain control amplifier. |
| 4 | A VOL | A-CH gain adjustment resistor/bypass capacitor connection terminal of gain control amplifier. |
| 5 | PILOT OUT | Pilot signal output terminal. |
| 6 | ENV DET IN | Envelope detection input terminal. |
| 7 | ENV HOLP | Envelope detection hold capacitor connection terminal. |
| 8 | S/H 3 OUT | Sample and hold 3 output terminal. |
| 9 | SWP | Process signal's A-CH/B-CH select control terminal (H : B-CH, L : A-CH). |
| 10 | ATF ON/OFF | ATF block (other than RF DET) ON/OFF select terminal. |
| 11 | NORM PLAY | Determines whether the normal mode is entered (L : Normal mode). |
| 12 | ATS1 | Sample and hold 1 sample pulse input terminal. |
| 13 | TE | Tracking error output terminal. |
| 14 | VCC | Power supply. |
| 15 | HOLD3C | Sample and hold 3 hold capacitor connection terminal. |
| 16 | HOLD2C | Sample and hold 2 hold capacitor connetion terminal. |
| 17 | ATS2 | Sample and hold 2 sample input terminal. |
| 18 | ATS3 | Sample and hold 3 sample pulse input terminal. |
| 19 | SYNC OUT | ATF sync signal output terminal. |
| 20 | GND | GND. |
| 21 | LIM PC | Limiter block's bypass capacitor connection terminal (can be replaced with pin 22). Negative input. |
| 22 | LIM IN | Limiter input terminal (can be replaced with pin 21). Positive input. |
| 23 | EQ OUT | ATF sync equalizer output terminal. |
| 24 | PCTL | Resistor connection terminal for sync equalizer's phase characteristics. |
| 25 | LCTL | Resistor connection terminal for sync equalizer low-range characteristics. |
| 26 | DET C1 | Smoothing capacitor connection terminal which determines the RF detector's threshold. |
| 27 | DET C2 | RF envelope waveform's adjustment capacitor connection terminal. |
| 28 | RF DET OUT | RF detector output terminal. |

### IC528(CXD1009Q)

| Pin No. | Symbol | Description |
|---|---|---|
| 1 | PTRD | Input from CXD1008Q. (Identifies whether the ECC data is a pointer or data.) |
| 2 | PRGE | ECC program end signal (from CXD1008Q). |
| 3 | ECA0 | ECC code address (from CXD1008Q). |
| 4 | ECA1 | ECC code address (from CXD1008Q). |
| 5 | ECA2 | ECC code address (from CXD1008Q). |
| 6 | ECA3 | ECC code address (from CXD1008Q). |
| 7 | ECA4 | ECC code address (from CXD1008Q). |
| 8 | C1C2 | To CX1008Q (C1 and C2 process identification). |
| 9 | PRGS | To CXD1008Q (ECC program start signal). |
| 10 | ECRP | To CXD1008Q (ECC encode/decode identification). |
| 11 | PREN | To CXD1008Q (ECC external RAM I/O process enable). |
| 12 | Vss | GND. |
| 13 | CLKO | To CXD1008Q (18.816MHz output). |
| 14 | CSET | To CXD1008Q (CXD1008/CXD1009 sync signal). |
| 15 | FLCT | To CXD1008Q (control signal). |
| 16 | DARE | To CXD1008Q (DA data read enable). |
| 17 | SRVS | From CXD1008Q (12.8kHz servo reference signal). |
| 18 | C94M | 9.408MHz output. |
| 19 | PLCK | 9.408MHz RF PL playback lock ±⊿. |
| 20 | CRCM | W1+W2+parity CRC monitor in PB mode. |
| 21 | SWP | Switching pulse input. |
| 22 | DPG | DPG pulse input. |
| 23 | SVRF | 100/3Hz servo reference signal. |
| 24 | RSEL | External RAM selection (L: SRAM, H: DRAM). |
| 25 | SBSY | Subcode sync signal. |
| 26 | SBDT | Operation mode setting and subdata I/O micrtcomputer interface. |
| 27 | EXCK | SBDT I/O clock (from system control). |
| 28 | DTC1 | SBDT control 1. |
| 29 | DTC2 | SBDT control 2. |
| 30 | LRCK | LR clock (L: L-CH, R: R-CH). |
| 31 | WCK | Word clock. |
| 32 | EXSY | System sync signal. Master mode: Output, Slave mode: Input. |
| 33 | $V_{DD}$ | 5V. |
| 34 | ATD2 | ATF signal. Pilot signal window pulse in REC mode. |
| 35 | ATD1 | Overall track's tracking information. |
| 36 | ATSY | PB ATF signal from CXD1046M. |
| 37 | ATS3 | On track pilot sampling pulse. |
| 38 | ATS2 | Adjacent track pilot sampling pulse. |
| 39 | ATS1 | Adjacent track pilot sampling pulse. |
| 40 | RFSF | RF PB signal's envelope detection signal. |
| 41 | PHCO | RF PLL's phase comparison signal. |
| 42 | TEST | Test terminal. Usually set to low. |
| 43 | VCOI | VCO oscillation terminal (input). |
| 44 | VCOO | VCO oscillation terminal (output). |
| 45 | CKOE | Usually set to low. |
| 46 | PBDT | RF PB signal input. |
| 47 | XCLR | System clear input. System is cleared when low (during power on reset). |

| Pin No. | Symbol | Description |
|---|---|---|
| 48 | REDT | RF REC signal output. |
| 49 | REPB | REC window pulse. |
| 50 | XT1O | 18.816MHz crystal oscillator terminal (output). |
| 51 | XT1I | 18.816MHz crystal oscillator terminal (input). |
| 52 | VSS | GND. |
| 53 | XEAN | External RAM's external addressing enable. |
| 54 | XWE | External RAM WE. |
| 55 | XOE | External RAM OE. |
| 56 | AD00 | External RAM address(LSB). |
| 57 | AD01 | External RAM address. |
| 58 | AD02 | External RAM address. |
| 59 | AD03 | External RAM address. |
| 60 | AD04 | External RAM address. |
| 61 | AD05 | External RAM address. |
| 62 | AD06 | External RAM address. |
| 63 | AD07 | External RAM address. |
| 64 | AD08 | External RAM address. |
| 65 | AD09 | External RAM address. |
| 66 | AD10 | External RAM address. |
| 67 | AD11 | External RAM address. |
| 68 | AD12 | External RAM address. |
| 69 | AD13 | External RAM address (MSB). |
| 70 | D0 | External RAM data bus (LSB). |
| 71 | D1 | External RAM data bus. |
| 72 | D2 | External RAM data bus. |
| 73 | $V_{DD}$ | Power supply (+5V). |
| 74 | D3 | External RAM data bus. |
| 75 | D4 | External RAM data bus. |
| 76 | D5 | External RAM data bus. |
| 77 | D6 | External RAM data bus. |
| 78 | D7 | External RAM data bus (MSB). |
| 79 | DE | Controls whether the CXD1008Q's data bus is set to the output mode. |
| 80 | RW | Identifies whether CXD1008Q reads or writes data. |

**IC529(CXD1008Q)**

| Pin No. | Symbol | Description |
|---|---|---|
| 1 | XRST | Reset terminal. Reset when low. |
| 2 | TST1 | Test terminal. Usually, set to low. |
| 3 | PHCO | Phase comparison signal output to generate variable pitch's 256FS (tristate). |
| 4 | TST2 | Test terminal. Usually set to low. |
| 5 | DALF | Selects whether the DADT serial data is set to LSB first or MSB first. Set to LSB first when high. |
| 6 | VCOI | VCO input (variable pitch's 256FS). FS's variable range is within reference FS±12%. |
| 7 | ADLF | Selects whether the ADDT serial data is set to LSB first or MSB first. Set to LSB first when high. |
| 8 | XT2I | Crystal oscillator circuit 2's input (44.1kHz×512=22.5792MHz). |
| 9 | XT2O | Crystal oscillator circuit 2's output. |
| 10 | $V_{SS}$ | GND (0V). |
| 11 | XT3I | Crystal oscillation circuit 3's input (48kHz×512=24.576MHz). |
| 12 | XT3O | Crystal oscillator circuit 3's output. |
| 13 | AUDR | Selects whether the playback data is audio 16-bit data. The audio 16-bit mode is entered when high. No interpolation (1) is done when low. The PCM 16 bits are divided into high-order 8 bits and low-order 8 bits. Their error flags are then output. |
| 14 | MNTG | Indicates that error correction status's monitor data is being output to D7 through D0 when high. |
| 15 | LRO1 | 15BCK-delayed LRCK signal. |
| 16 | LRO2 | 16BCK-delayed LRCK signal. |
| 17 | LRO3 | Inverted LRO2's H and L signals. |
| 18 | DFCK | 256FS output terminal. Output when FSEN is high; high impedance when FSEN is low. |
| 19 | DIOC | 128FS input/output terminal. Output when FSEN is high; input when FSEN is low. |
| 20 | DADT | DA serial data output data (playback data in PB mode and REC monitor data in REC mode). L-CH data is input or output from ADDT and DADT when LRCK is low. When it is high, R-CH data is input or output. |
| 21 | ERRF | DA serial data output error flag. Indicates that there is an error when high. |
| 22 | ADDT | AD serial data input (record data input). When LRCK is low, L-CH data is input or output from ADDT and DADAT. When it is high, R-CH data is input or output. |
| 23 | XBCK | Inverted "H"/"L" BCK signal. |
| 24 | BCK | 64$F_S$ input/output terminal. Output when FSEN is high; input when FSEN is low. |
| 25 | WCK | 2$F_S$ input/output terminal. Output when FSEN is high; input when FSEN is low. |
| 26 | $V_{DD}$ | Power supply+5V. |
| 27 | LRCK | $F_S$ input/output terminal. Output when FSEN is high; input when FSEN is low. |
| 28 | FSEN | Selects whether DFCK, DIOC, BCK, WCK, and LRCK signals should be output. Output when it is high. |
| 29 | MUTG | PB/REC data muting control signal. Mute on when it is high; mute off when it is low. |
| 30 | PIDN | Variable pitch control signal. Pitch is descreased 0.1% at every leading edge ($F_S$ is decreased 0.1% as compared with reference). |
| 31 | PIUP | Variable pitch control signal. Pitch is increased 0.1% at every leading edge ($F_S$ is increased 0.1% as compared with reference). |
| 32 | CTL2 | Status data input control signal. Status data is shifted and input when CTL2 and CTL1 are high. |
| 33 | CTL1 | Status data input control signal. Status data is shifted and input when CTL2 and CTL1 are high. |
| 34 | EXCK | Status data shift input clock. Status data is shifted and input at leading edge. |

| Pin No. | Symbol | Description |
|---|---|---|
| 35 | STAT | Status data serial input terminal. |
| 36 | SBSY | Status data load signal. Shifted status data is loaded into status register at the trailing edge. |
| 37 | SRVS | 12.8kHz servo reference signal. (Can be changed at 12.8kHz ±12% in variable pitch mode.) |
| 38 | ADAE | AD/DA data is input or output from D0 through D7 when is high. |
| 39 | FLGC | Forcible error flag, erasure correction inhibit, and muting control signals are input during time sharing. |
| 40 | CKRS | Master clock reset signal. Reset when is high. |
| 41 | CLKI | Master clock (18.816MHz). |
| 42 | $V_{SS}$ | GND. |
| 43 | PREN | ECC data input/output request inhibit signal. Request is inhibited when is low. |
| 44 | RCPB | Controls whether ECC is encoded (in REC mode) or decoded (in PB mode). Encoded when is high. |
| 45 | PRGS | ECC process start signal. Started at the leading edge. |
| 46 | C1C2 | Controls whether ECC process is related to C1 code or C2 code. C1 code is processed when is high. |
| 47 | A4 | ECC data location A4 (MSB). |
| 48 | A3 | ECC data location A3. |
| 49 | A2 | ECC data location A2. |
| 50 | A1 | ECC data location A1. |
| 51 | A0 | ECC data location A0 (LSB). |
| 52 | PRGE | Inverted from high to low and vice versa whenever ECC data is processed every code. |
| 53 | PTRD | Indicates whether ECC data input and output is requested by error pointer or code data. Requested by error pointer when is high. |
| 54 | RW | Indicates whether ECC data input and output is requested by input (read from RAM) or output (write to RAM). Requested by input when is high. |
| 55 | XDOE | Controls whether signals at D0 through D7 should be output. Output when is low. |
| 56 | $D_7$ | External data bus terminal (MSB). |
| 57 | $D_6$ | External data bus terminal (2SB). |
| 58 | $V_{DD}$ | Power supply (+5V). |
| 59 | D5 | External data bus terminal (3SB). |
| 60 | D4 | External data bus terminal (4SB). |
| 61 | D3 | External data bus terminal (5SB). |
| 62 | D2 | External data bus terminal (6SB). |
| 63 | D1 | External data bus terminal (7SB). |
| 64 | D0 | External data bus terminal (LSB). |

### IC4( μPD75312GF-099-3B9)

| Pin No. | Symbol | Description |
|---|---|---|
| 1 | S12 | LCD segment signal output terminal |
| 2 | S13 | LCD segment signal output terminal |
| 3 | S14 | LCD segment signal output terminal |
| 4 | S15 | LCD segment signal output terminal |
| 5 | S16 | LCD segment signal output terminal |
| 6 | S17 | LCD segment signal output terminal |
| 7 | S18 | LCD segment signal output terminal |
| 8 | S19 | LCD segment signal output terminal |
| 9 | S20 | LCD segment signal output terminal |
| 10 | S21 | LCD segment signal output terminal |
| 11 | S22 | LCD segment signal output terminal |
| 12 | S23 | LCD segment signal output terminal |
| 13 | XREQM | Communication request signal output to μPD75108GF |
| 14 | L/S | Load shift output for BU3508K |
| 15 | SOSEL | Serial out select signal output |
| 16 | CS | Chip select output for LCD driver |
| 17 | C/D | Command/data select output for LCD driver |
| 18 | UNLOCK | Digital signal input. "H" when recording. |
| 19 | ——— | No connection |
| 20 | TEST | Test mode detection output |
| 21 | COM0 | LCD common signal output |
| 22 | COM1 | LCD common signal output |
| 23 | COM2 | No connection |
| 24 | COM3 | No connection |
| 25 | BIAS | Bias terminal for LCD drive |
| 26 | VLC0 | Power supply terminal for LCD drive |
| 27 | VLC1 | Power supply terminal for LCD drive |
| 28 | VLC2 | Power supply terminal for LCD drive |
| 29 | EMP | Emphasis control output |
| 30 | MUTE | Mute output |
| 31 | REC | REC mode output |
| 32 | B.LIGHT | LCD back light output |
| 33 | VSS | GND |
| 34 | RST1 | Reset signal output for μPD75108GF etc. |
| 35 | RST2 | Reset signal output for CXD1008, CXD1009 etc. |
| 36 | S.POWER | ON/OFF signal output for DC/DC converter |
| 37 | NOCNT | ON/OFF signal output for NO • 5V circuit |
| 38 | POWER | Power switch input signal |
| 39 | SCK | Interface serial clock signal input/output |
| 40 | SO | Serial data output |

| Pin No. | Symbol | Description |
|---|---|---|
| 41 | SI | Serial data input |
| 42 | SBSY | Input terminal for sub-sync signal from CXD1009 |
| 43 | VM | Power supply voltage detection for high speed mode to low speed mode selection |
| 44 | DIAN | Digital/analog signal input select switch |
| 45 | 12/24 | Clock display, 12H/24H select input terminal |
| 46 | DTCTL1 | Communication control signal 1 for CXD1009 |
| 47 | DTCTL2 | Communication control signal 2 for CXD1009 |
| 48 | SUBCS | Communication chip select output for CXD1009 |
| 49 | BUZZER | Buzzer output |
| 50 | LIGHT | Back light switch input |
| 51 | LBUSY | LCD driver BUSY signal input |
| 52 | OVFL | Level meter left channel "OVER" illumination input |
| 53 | OVFR | Level meter right channel "OVER" illumination input |
| 54 | VDD | +5V |
| 55 | XT1 | X'tal connection terminal for sub system clock oscillation (32.768 kHz) |
| 56 | XT2 | X'tal connection terminal for sub system clock oscillation (32.768 kHz) |
| 57 | NC | No connection |
| 58 | X1 | X'tal connection terminal for main system clock oscillation (4.194 MHz) |
| 59 | X2 | X'tal connection terminal for main system clock oscillation (4.194 MHz) |
| 60 | D1 | Level meter IC data input |
| 61 | D2 | Level meter IC data input |
| 62 | D3 | Level meter IC data input |
| 63 | D4 | Level meter IC data input |
| 64 | MRES | Level meter reset output |
| 65 | REQ | Level meter left channel/right channel data select output |
| 66 | GS1 | Level meter IC select output |
| 67 | GS2 | Level meter IC select output |
| 68 | RESET | $\mu$PD75308 reset input |
| 69 | S0 | LCD segment signal output terminal |
| 70 | S1 | LCD segment signal output terminal |
| 71 | S2 | LCD segment signal output terminal |
| 72 | S3 | LCD segment signal output terminal |
| 73 | S4 | LCD segment signal output terminal |
| 74 | S5 | LCD segment signal output terminal |
| 75 | S6 | LCD segment signal output terminal |
| 76 | S7 | LCD segment signal output terminal |
| 77 | S8 | LCD segment signal output terminal |
| 78 | S9 | LCD segment signal output terminal |
| 79 | S10 | LCD segment signal output terminal |
| 80 | S11 | LCD segment signal output terminal |

## IC523( μPD75112GF-686-3BE)

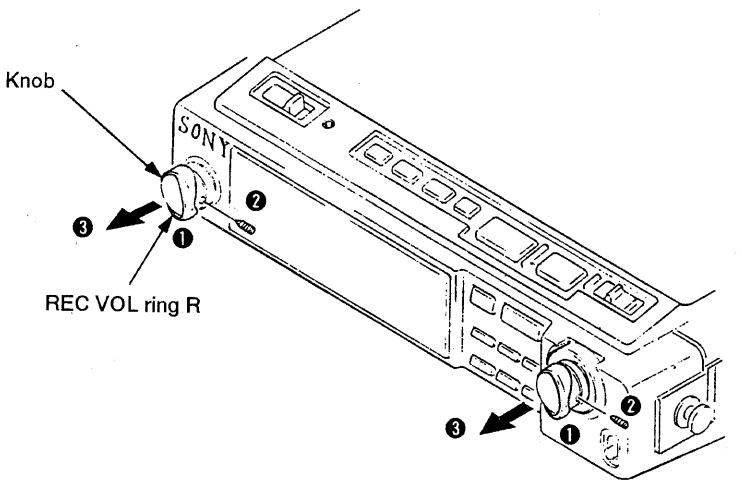
| Pin No. | Symbol | Description |
|---|---|---|
| 1 | PLAY | PLAY mode output |
| 2 | RECPB | REC mode output |
| 3 | PAUSE | REC power supply ON/OFF select output |
| 4 | —— | No connection |
| 5 | STIDO | Start ID output |
| 6 | DIAN | Digital/analog select output |
| 7 | RESET | μPD75108GF reset input |
| 8 | X'TAL2 | Clock oscillation X'tal (4.194 MHz) |
| 9 | X'TAL1 | Clock oscillation X'tal (4.194 MHz) |
| 10 | LIMSW | Limit switch input (unload position) |
| 11 | REFWD | Rotary encoder position detection input (FWD position) |
| 12 | RESTP | Rotary encoder position detection input (STOP position) |
| 13 | COPY | Copy prohibition bit information input during digital input (Copy can be done at "L"). |
| 14 | JSTL | Drum just lock signal input |
| 15 | XFCO | Sampling frequency check input during digital input |
| 16 | SYSPOW | DC • DC converter ON/OFF detection input |
| 17 | UNLOCK | PLL unlock signal input during digital input |
| 18 | STIDI | Start ID signal input |
| 19 | PRCN | AES/EBU and SONY/Phillips select output for digital output |
| 20 | FS2 | FS data input 2 |
| 21 | FS1 | FS data input 1 |
| 22 | XREW | REW direction output signal |
| 23 | XDON | Drum motor ON/OFF signal output |
| 24 | XSER | Search mode output to drum servo |
| 25 | XC16 | Capstan servo constant select output for x16 speed |
| 26 | VSS | GND |
| 27 | PLLK | Playback output existence detection input |
| 28 | CFG32 | Capstan FG signal (divided by 32) input |
| 29 | REELS | Supply side reel motor FG input |
| 30 | REELT | Take-up side reel motor FG input |
| 31 | HLOCK | Holder lock switch ON/OFF input |
| 32 | BATT | Power supply voltage input terminal |
| 33 | TEN | Supply side reel voltage input |
| 34 | DEW | Dew detection circuit input |
| 35 | CDIRI | Flag input for inversion of capstan rotational direction |
| 36 | EMPI | Emphasis control input |
| 37 | SOFT | Soft tape recognition switch input |
| 38 | XRECEN | Accidental erasure protection detection switch input |
| 39 | XCASIN | Tape detection switch input |
| 40 | 1.5TP | Wide track tape detection switch input |

| Pin No. | Symbol | Description |
|---|---|---|
| 41 | SI | Serial data input |
| 42 | SO | Serial data output |
| 43 | SCK | Serial clock output |
| 44 | XREQM | Communication request signal input from μPD75308 |
| 45 | TREG | Tension regulator ON/OFF output |
| 46 | CPH | Capstan motor phase servo ON/OFF output |
| 47 | XTLOCK | Output for take-up reel side lock state indication |
| 48 | CDIRO | Output for capstan motor rotational direction indication |
| 49 | ——— | No connection |
| 50 | RCK | Serial clock output for D/A converter |
| 51 | RSTB | Strobe output for D/A converter |
| 52 | RDT | Serial data output for D/A converter |
| 53 | DATF | ATF gain-up ON/OFF output |
| 54 | XATF | ATF ON/OFF output |
| 55 | PLG − | Brake ON |
| 56 | PLG + | Brake release |
| 57 | ——— | No connection |
| 58 | VDD | +5V |
| 59 | RSWP | Drum switching pulse input |
| 60 | END T/S | Sensor input for tape end detection |
| 61 | LEDS | Illumination output of supply reel side end detection LED |
| 62 | LEDT | Illumination output of take-up reel side end detection LED |
| 63 | UNLOAD | Tape loading motor rotation inversion output |
| 64 | LOAD | Tape loading motor normal rotation output |

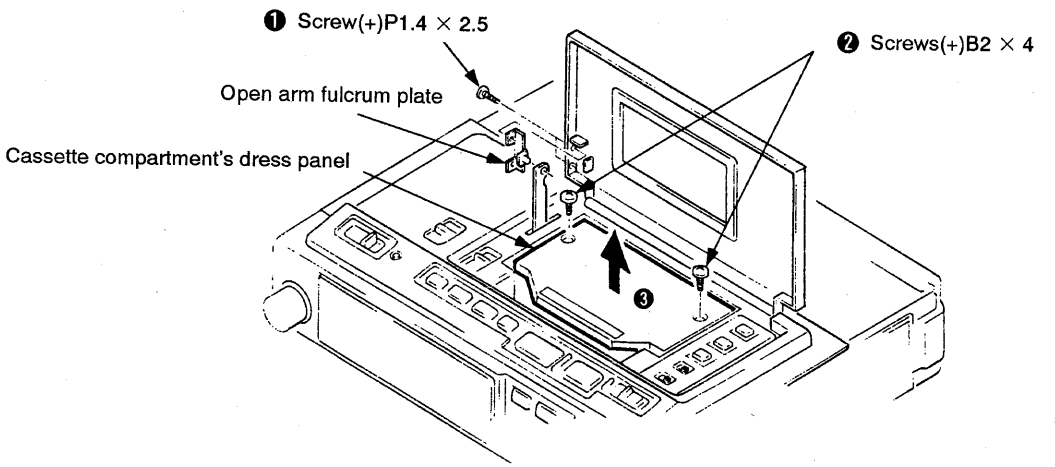
# 2. DISASSEMBLY

**Note:** Follow the disassembly procedure in the numerical order given.

## 2-1. KNOB

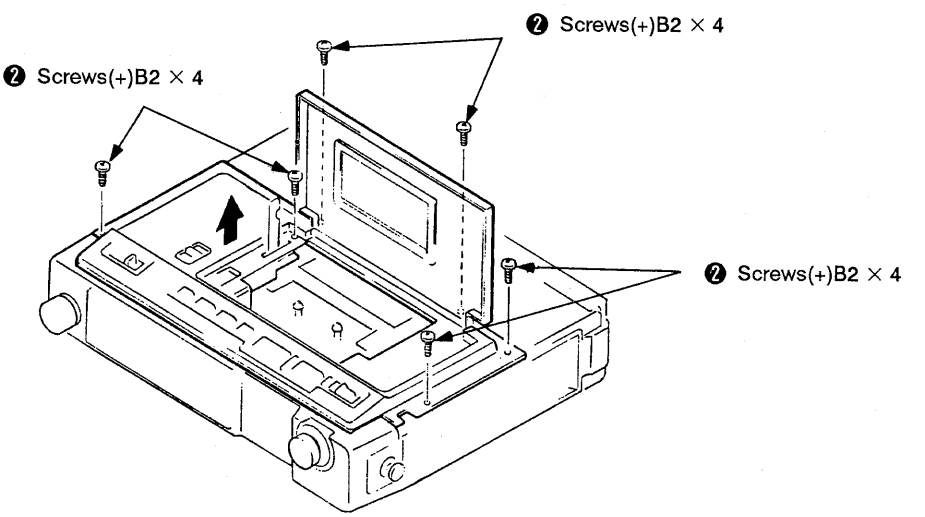



## 2-2. CASSETTE COMPARTMENT'S DRESS PANEL

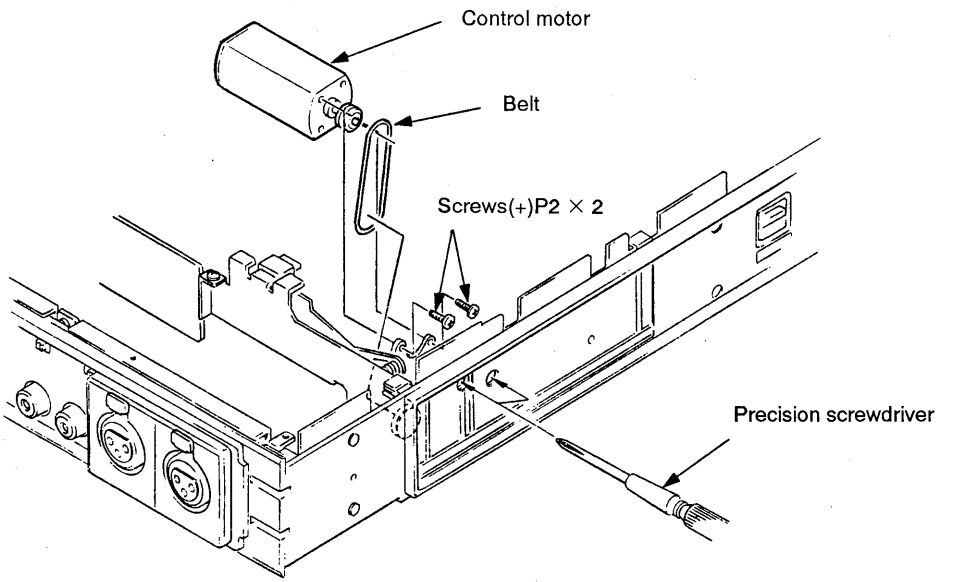



## 2-3. CABINET(UPPER)

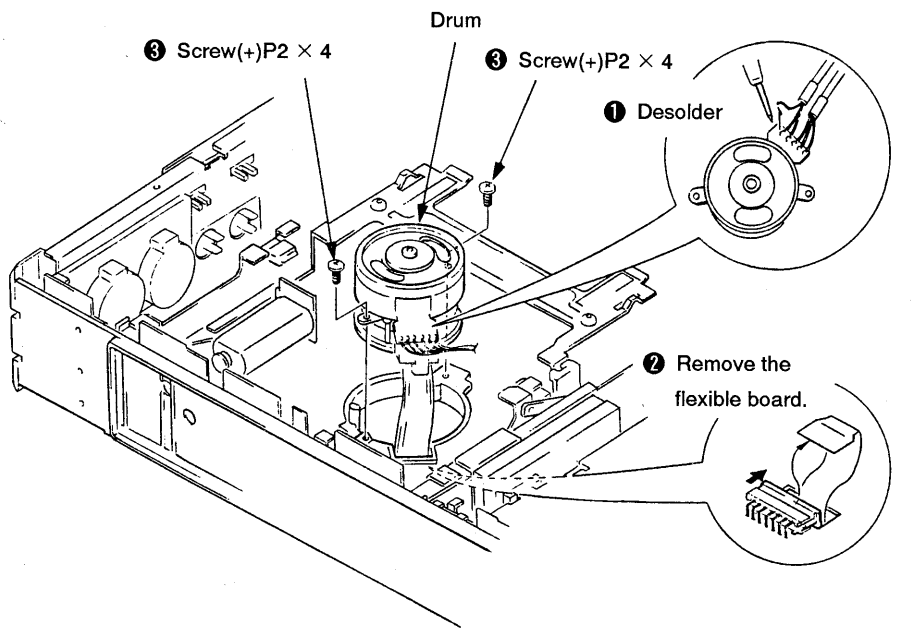
❶ Remove the panel(upper).



## 2-4. CONTROL MOTOR

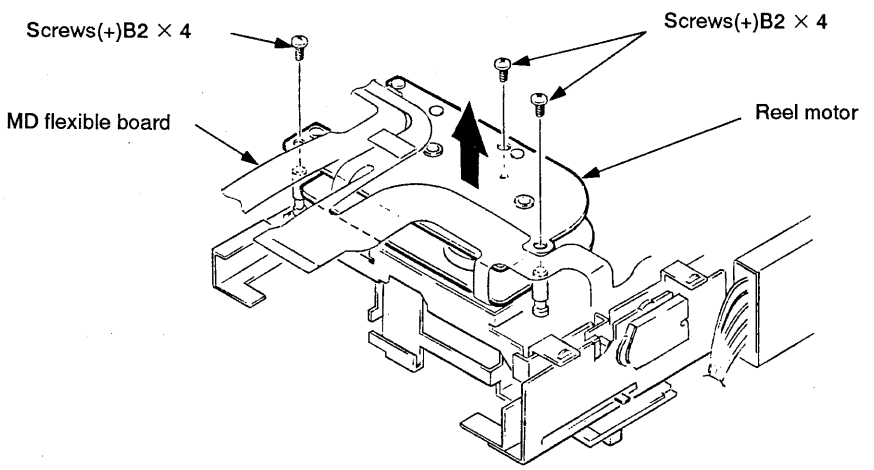



## 2-5. DRUM

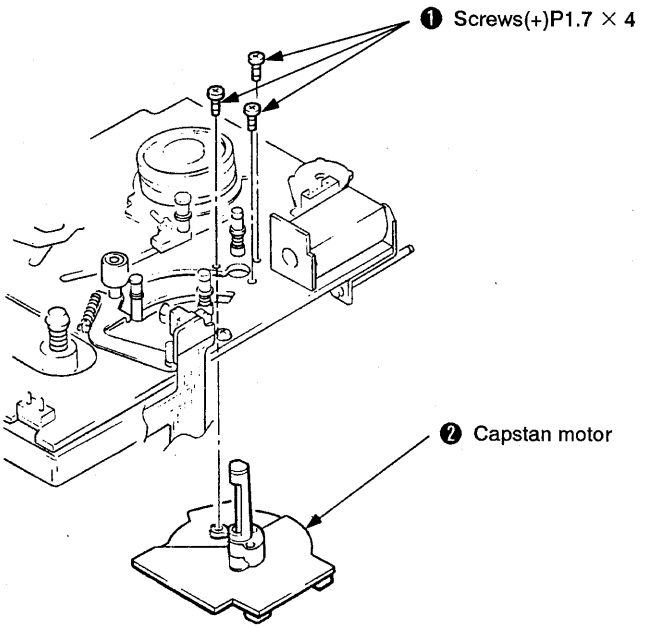


## 2-6. REEL MOTOR

**Note:** Be careful not to damage the MD flexible board when installing or removing the reel motor.




## 2-7. CAPSTAN MOTOR

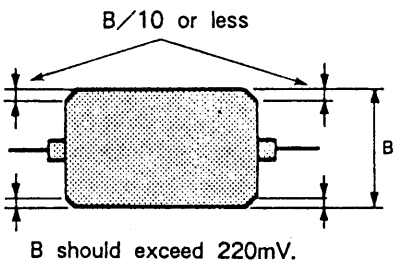


# 3. ADJUSTMENTS

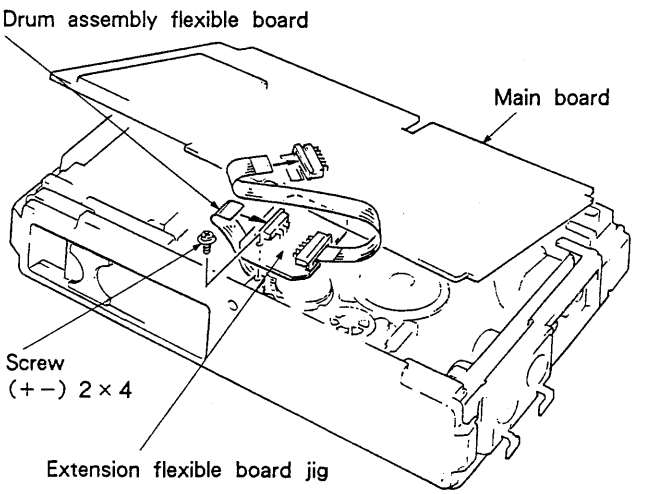
**Preparations**

1. Perform the adjustment in the order described.
2. Use the following alignment tapes:
   TY-7111(8-909-812-00):Level
   TY-7251(8-909-813-00):Tracking
   TY-7551(8-909-814-00):Function
   TY-30B(8-892-358-00):Blank
   Use the following torque meters:
   TW-7131(8-909-708-71):FWD
   TW-7231(8-909-708-72):FF/REW

* Check that the DPG adjustment and tape path fine-adjustment satisfy the adjustment value when replacing the drum unit. If not, correct the adjustment value. For the tape path fine-adjustment, it is within the adjustment value if the RF signal waveform at TP529(AMP.RF)is as shown below.




3. Use the extension flexible board jig for connecting the drum assembly flexible board and the main board.
   Extension flexible board jig(J-8000-009-A)




**TEST MODE**

1. The test mode is entered when all power to the system is turned off(all power off)and test mode tap on the syscon board is solder-bridged(see Fig.(1)).
2. The test mode is entered as soon as the POWER switch is turned on.
3. The test mode is canceled and the normal mode is entered when the portion solder-bridged in Step 1 is open in the all power off mode and power is turned on.

**Note:** Be sure to return the set to the normal mode after repair.

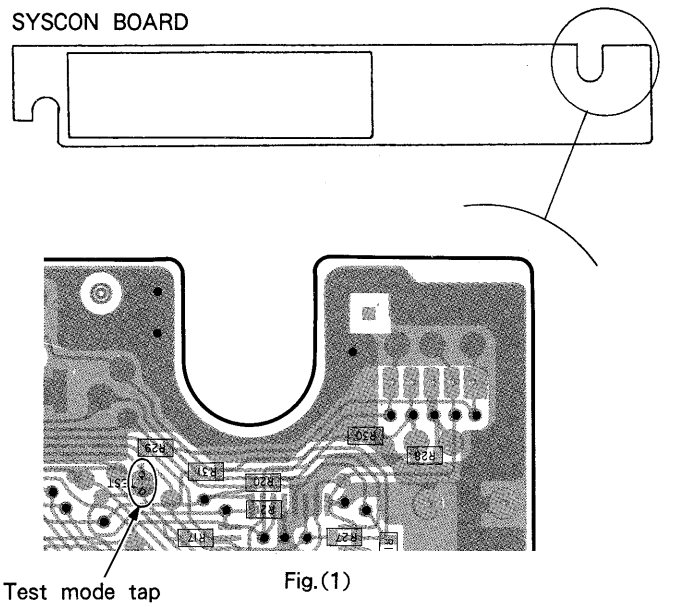
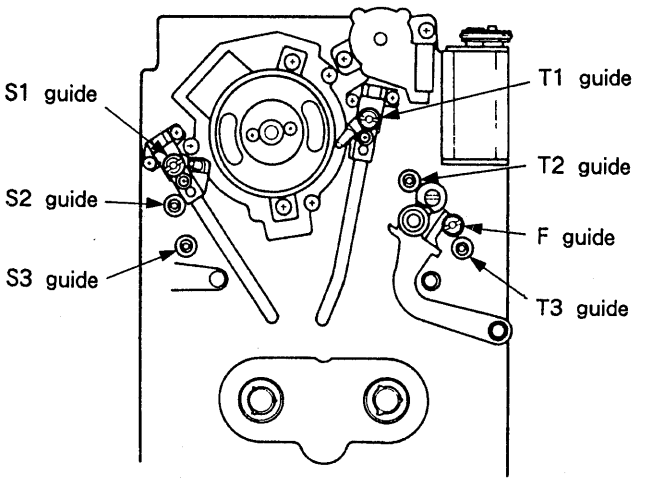



Fig.(1)

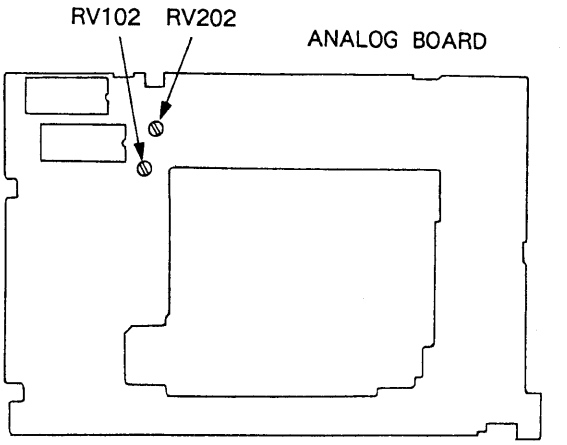
**OPERATION IN TEST MODE**

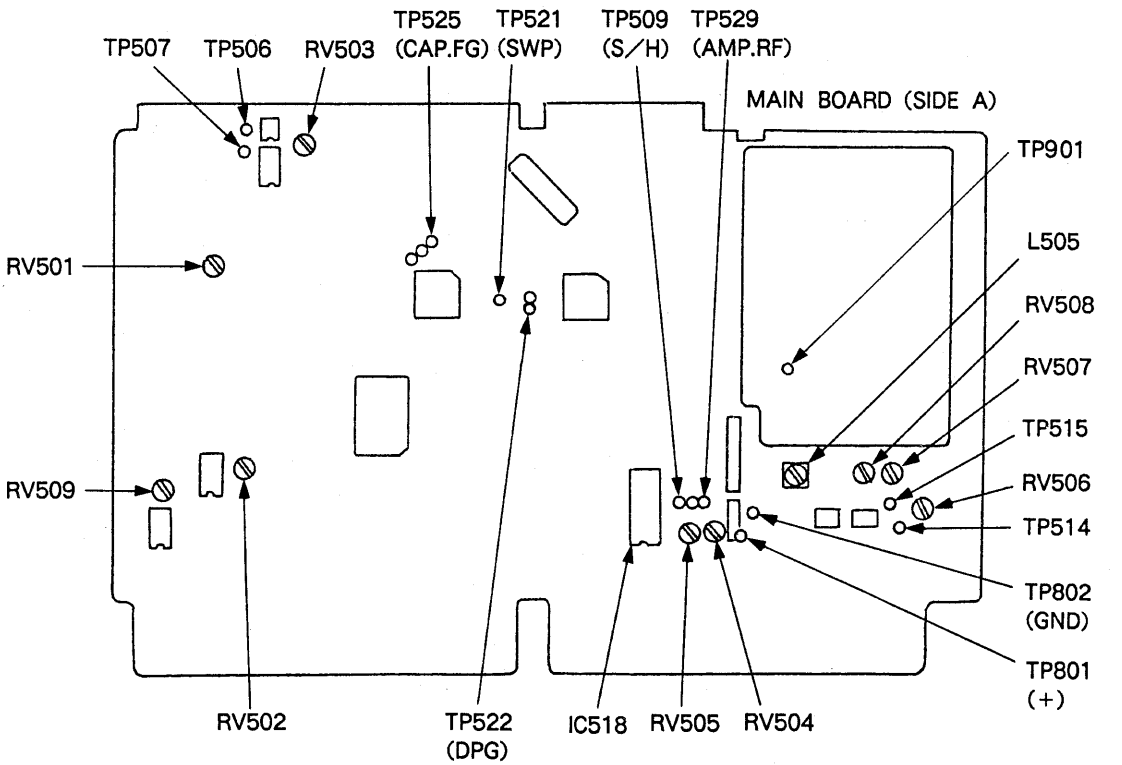
| Mode | Operation key |
|---|---|
| Loading | STOP |
| Unloading | CLOCK |
| × 1.5 | PLAY+FF |
| − × 1.5 | PLAY+REW |
| CUE( × 2.6) | Press the FF button in PLAY mode. |
| REVIEW ( − × 2.6) | Press the REW button in PLAY mode. |
| CUE( × 16) | Press the PLAY button in CUE( × 2.6)mode. |
| REVIEW ( − × 16) | Press the PLAY button in REVIEW ( − × 2.6)mode. |
| Other operations are the same as in normal mode. | |

- **Adjustment Location**




Mechanism assembly

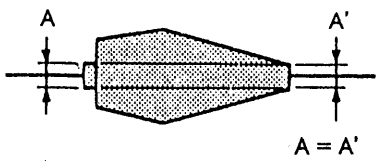


## 3-1. MECHANICAL ADJUSTMENTS

**T2 Guide Adjustment**
**Adjustment:**

1. Connect CH-1 of an oscilloscope to TP529(AMP, RF)and CH-2 to TP521(SWP).
2. Insert test tape TY-7251 and put the set into TEST mode.
   While pressing the PLAY switch, press the FF button(to enter the × 1.5 mode).
3. Raise guide T1 so that the RF signal waveform is as shown below.




4. Raise guide T2 and align it with the lower edge of the tape.
5. Lower guide T1 so that the RF signal waveform is normal.
6. Check that the tape is aligned with the lower edge of guide T3.
   If it is not, repeat Step 4.

**Adjustment Location:**Mechanism assembly

**S2 Guide Adjustment**
**Adjustment:**

1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY(▶)mode.
2. Raise guide S2 and align it with the lower edge of the tape.
   **Note:** Check that no curl occurs at guide S2 in the REW(◀◀) mode.

**Adjustment Location:**Mechanism assembly

**F Guide Adjustment**
**Adjustment:**

1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY(▶)mode.
2. Align guide F with the lower edge of the tape.
   **Note:** Check that the tape is aligned with the lower edge of guide T3 and is not curled.

**Adjustment Location:**Mechanism assembly

**S3 Guide Adjustment**
**Adjustment:**

1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY(▶)mode.
2. Align guide S3 with the lower edge of the tape.
   **Note:** Check that the tape is aligned with the lower edge of guide S3 and is not curled.

**Adjustment Location:**Mechanism assembly

**T3 Guide Adjustment**
**Adjustment:**

1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY(▶)mode.
2. Align guide T3 with the lower edge of the tape.
   **Note:** Check that the tape is aligned with the lower edge of guide T3 and is not curled.

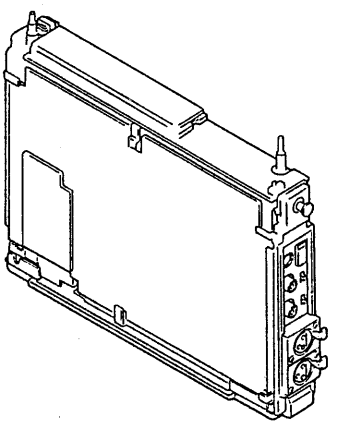
**Adjustment Location:**Mechanism assembly

**During the adjustment, see the adjustment location on page 24.**

## 3-2. ELECTRICAL ADJUSTMENTS

**FWD Back Tension Adjustment**

The FWD back tension varies depending on the set's position. Be sure to adjust the set positioned as shown below.



**Adjustment:**

1. Put the set into TEST mode.
2. Insert FWD torque meter TW-7131 and put the set into the loading mode(press the STOP button).
3. Put the set into the PLAY mode and adjust RV502 so that the back tension(at supply side)is within the adjustment value.

**Adjustment value:**4 to 5 g•cm
**Adjustment Location:**Main board

**ATF Tracking Voltage Adjustment**
**Adjustment:**

1. Connect a digital tester between main board TP506 and TP507.
2. Put the set into TEST mode.
3. Insert test tape TY-30B(blank tape)and put the set into the loading mode(press the STOP button).
4. Put the set into the STOP mode and adjust RV503 so that the potential difference at TP506 and TP507 is within the adjustment value.

**Adjustment value**: − 20 to 20mV
**Adjustment Location:**Main board

**Note:** When performing this adjustment, be sure to adjust the capstan speed at × 1.

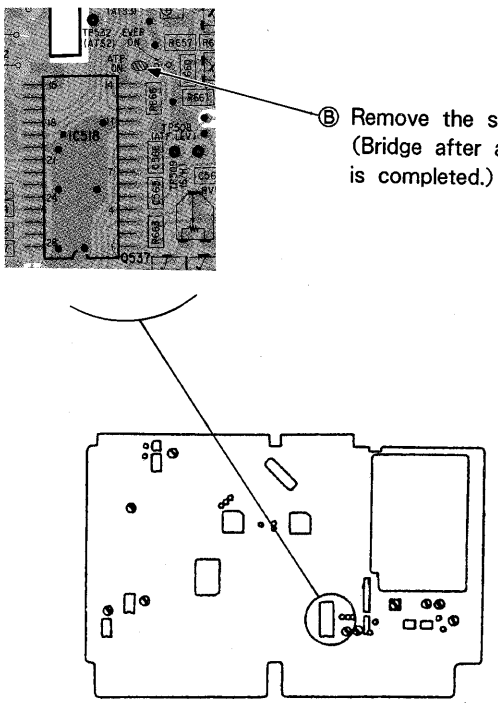
**Capstan Speed Adjustment( × 1)**

**Adjustment:**

1. Remove the solder bridge in Ⓑ.
2. Connect a frequency counter between main board TP525(CAP.FG)and GND.
3. Put the set into TEST mode.
4. Insert test tape TY-30B(blank tape)and put the set into the loading mode(press the STOP button).
5. Put the set into the PLAY mode and adjust RV501 so that the frequency at TP525(CAP.FG)is within the adjustmnet value.
6. Mount the bridge in Ⓑ.

**Adjustment value:**674 ± 1Hz

**Adjustment Location:**Main board



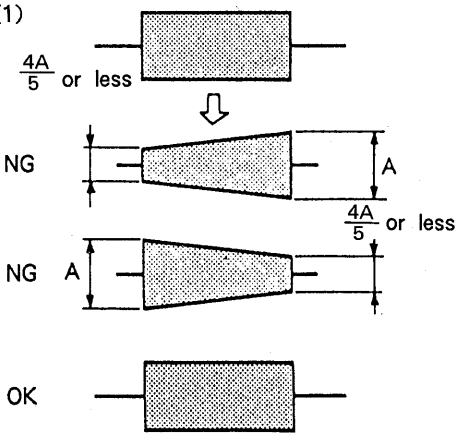

**Tape Path Fine-Adjustment**

Be sure to make this adjustment when replacing the drum unit.

**Adjustment:**

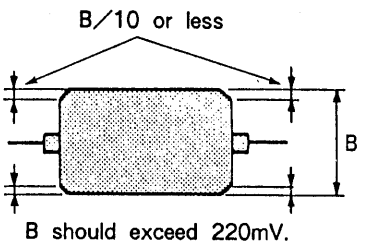
1. Put the set into TEST mode(turn off the POWER switch).
2. Open the pattern of RV503(in portion Ⓐ of the figure)and connect the ATF offset jig as shown in the figure.
3. Turn on the POWER switch, insert test tape TY-7251, and put the set into the loading mode(press the STOP button).
4. Press the FF button while pressing PLAY button.(to enter the × 1.5 mode).
5. Turn the ATF offset jig volume control so that the RF signal waveform is maximized and stabilized.
   Adjust guides S1 and T1 so that the RF signal waveform is almost square.
6. Finely adjust S1 and T1 so that the RF signal waveform is smaller but the same shape when the offset jig volume control is turned. Check that adjustment value(1)is satisfied.
   (Adjust guide S1 for the left of the waveform and guide T1 for the right of it.)

Adjustment value (1)

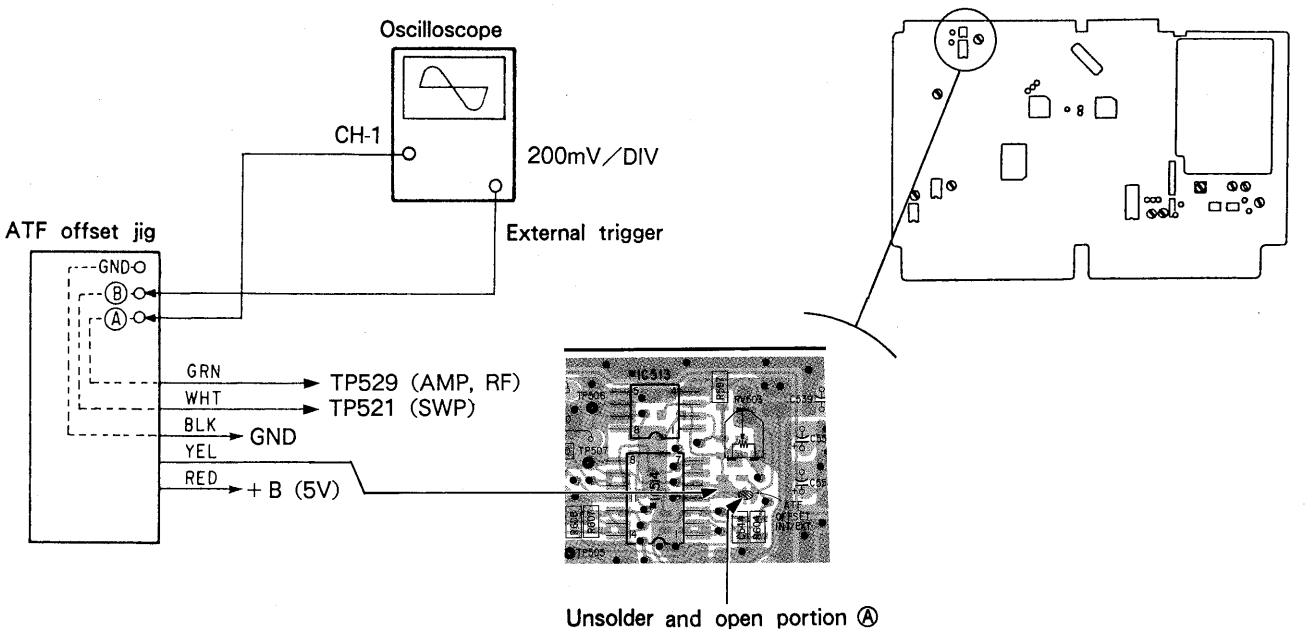



7. After adjustment is completed, remove the ATF offset jig, bridge the pattern of RV503, and check that the RF signal waveform is within the adjustment value(2). If the adjustment value is not satisfied, repeat Steps 2 through 6.

Adjustment value (2)



**Adjustment Location:**Main board



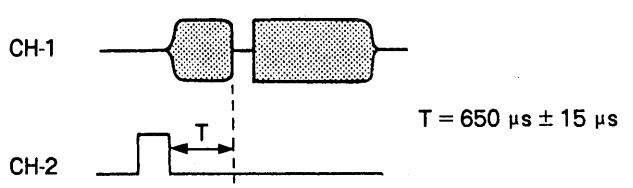

**DPG Adjustment**

Be sure to make this adjustment when replacing the drum unit.

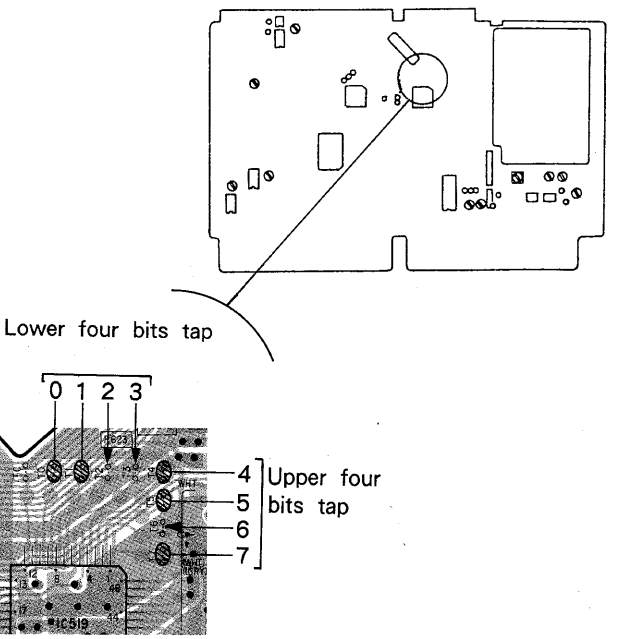
**Adjustment:**

1. Connect CH-1 of an oscilloscope to main board TP529(AMP.RF), and CH-2 to TP522(DPG).
   (Trigger CH-2)When the signal in CH-2 is inverted, synchronization is established at the trailing edge.
2. Switch the tap pattern to 8 in the center, and make a solder bridge. (The DPG SW code delay time is approximately 100 $\mu$s per step.)
3. To set to the test mode, insert the TY-7251 test tape, and press the FF button while pressing the PLAY switch. (Selects × 1.5 mode.)
4. Switch the tap pattern so that the time between the DPG pulse falling edge and no-signal falling edge of the RF signal is approximately 650 $\mu$s. (Rough adjustment)
   Upper four bits(TAP4, 5, 6, 7)
5. Next, switch the tap pattern for fine adjustment of the DPG pulse width so that the time between the DPG signal and RF signal is 650 ± 15 $\mu$s, as monitored on an oscilloscope.
   Lower bits(TAP0, 1, 2, 3)

**Adjustment value :**



**Adjustment Location:**Main board



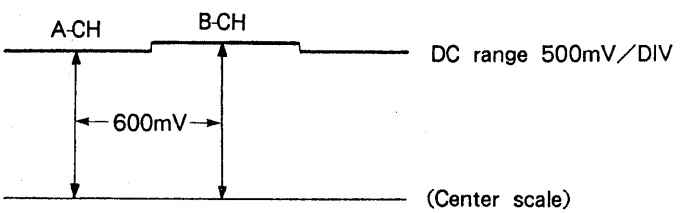

| Tap pattern | DPG SW code (Upper/Lower) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
| | 0/4 | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ |
| | 1/5 | | ○ | ○ | | | ○ | ○ | | | ○ | ○ | | | ○ | ○ |
| | 2/6 | | | | ○ | ○ | ○ | ○ | | | | | ○ | ○ | ○ | ○ |
| | 3/7 | | | | | | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**ATF Pilot Adjustment**

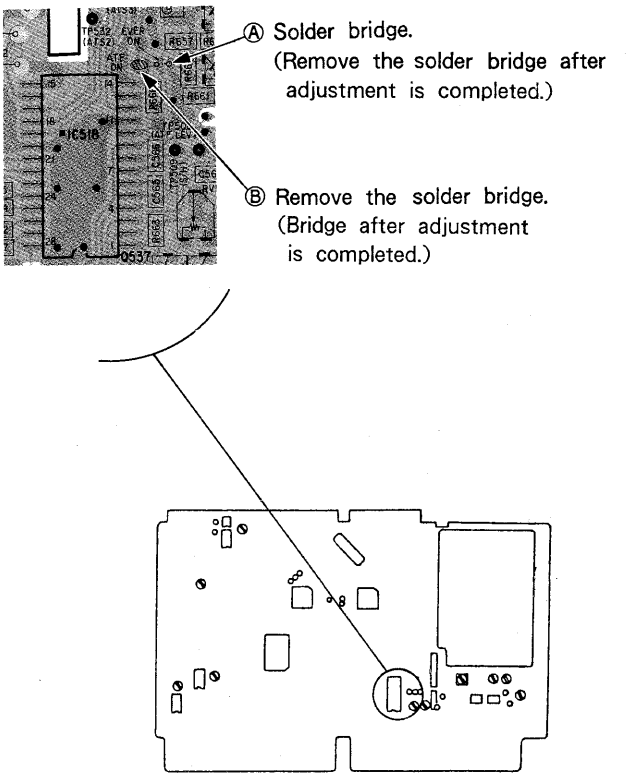
**Adjustment:**

1. Connect CH-1 of an oscilloscope to main board TP509(S/H), and CH-2 to TP521(SWP).
   (Trigger CH-2).
2. Put the set into TEST mode.
3. Insert test tape TY-7111 and put the set into the loading mode(press the STOP button).
4. Put the set into the STOP mode and adjust so that the luminescent spot on an oscilloscope at TP509(S/H)is located on the scale center.
   (Never align the spot with the center when the input is to GND.)
5. Turn all POWER OFF and bridge pins ⑩ and ⑪ of IC518(portion Ⓐ )and remove the bridge in portion Ⓑ .
6. Turn on the POWER and put the set into TEST mode.
   Change the mode from TEST to PLAY and adjust RV504(A-CH)and RV505(B-CH)so that the waveform on the oscilloscope is within the adjustment value.
   (The waveform deflects vertically from the 600mV reference.)
7. After adjustment is completed, restore bridge of IC518.

**Adjustment value :**




**Adjustment Location:**Main board


Ⓐ Solder bridge.
(Remove the solder bridge after adjustment is completed.)
Ⓑ Remove the solder bridge.
(Bridge after adjustment is completed.)
IC518

**VCO Free-Run Voltage Adjustment**

**Adjustment:**

1. Connect a digital tester between main board TP514 and GND.
2. Put the set into TEST mode.
3. Insert test tape TY-30B(blank tape)and put the set into the loading mode(press the STOP button).
4. Adjust RV506 so that the voltage at TP514 is within the adjustment value in the STOP mode.

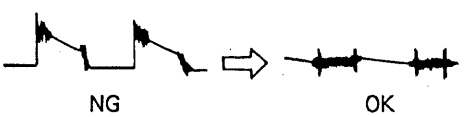
**Adjustment value:** − 3.1 to − 3.3V

**Adjustment Location:**Main board

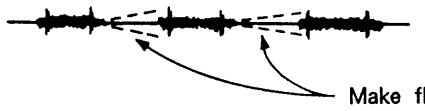
**VCO Adjustment**

**Adjustment:**

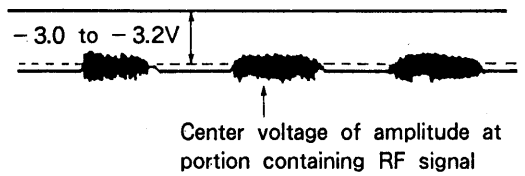
1. Connect CH-1 of an oscilloscope to main board TP521(SWP), and CH-2 to TP515.
   (Trigger CH-1.)
2. Put the set into TEST mode state.
3. Insert a music tape and put the set into the loading mode(press the STOP button).
4. Open the R702's tap(portion Ⓐ in the figure)and put the set into the CUE( × 2.6)mode.
5. Adjust RV507 so that the waveform at TP515 is as shown below.



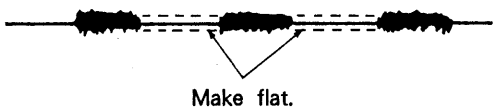
6. In the PLAY mode, adjust RV508 so that the waveform at TP515 is as shown below.



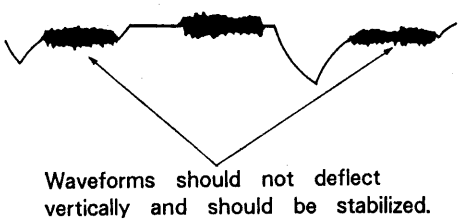

7. Put the set into the STOP mode and turn on off all POWER.
8. Bridge the R702's tap and turn on the POWER.
9. Put the set into the PLAY mode and adjust L505 so that the DC potential(containing an RF signal)at TP515 is within the adjustment value.




10. Put the set into the CUE( × 2.6)mode and adjust RV506 so that the waveform at TP515 is within the adjustment value.

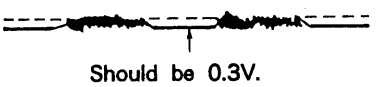



11. Put the set into the CUE( × 16)and REVIEW( – × 16)modes. Adjust RV507 so that the waveform at TP515 is within the adjustment value.

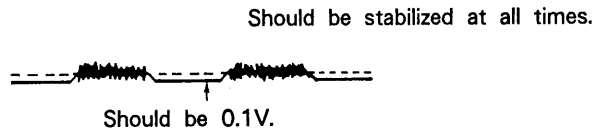



To enter the CUE( × 16)and REVIEW( – × 16)modes, press the PLAY button while pressing the FF or REW button in the PLAY mode.

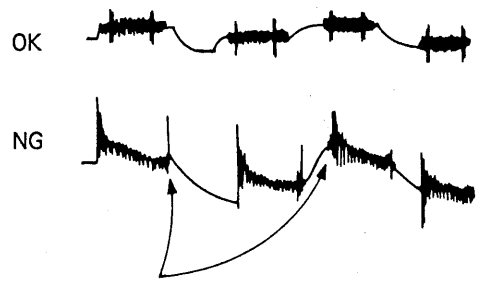
12. Put the set into the REVIEW( – × 2.6)mode and check the waveform at TP515.




13. Put the set into the PLAY mode and check the waveform at TP515.

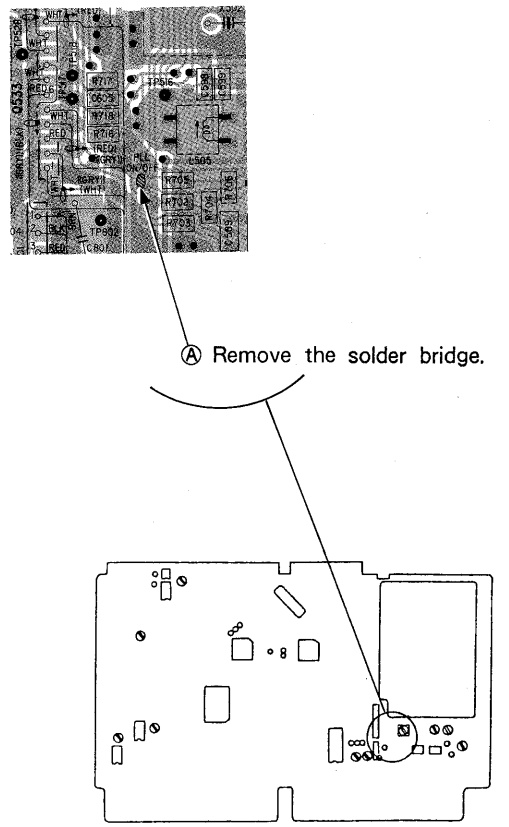



14. Put the set into FF-AMS mode and check the waveform at TP515.




15. Put the set into the STOP mode then the REW-AMS mode and check that the same waveform as in Step 14 is output.
16. If the waveforms in Steps 14 and 15 are NG, readjust RV507 and recheck Steps 11 through 15.

**Adjustment Location:**Main board



**Playback Equalizer Adjustment**

(Check that all adjustments prior to this adjustment are normal before making the Playback Equalizer Adjustment.)

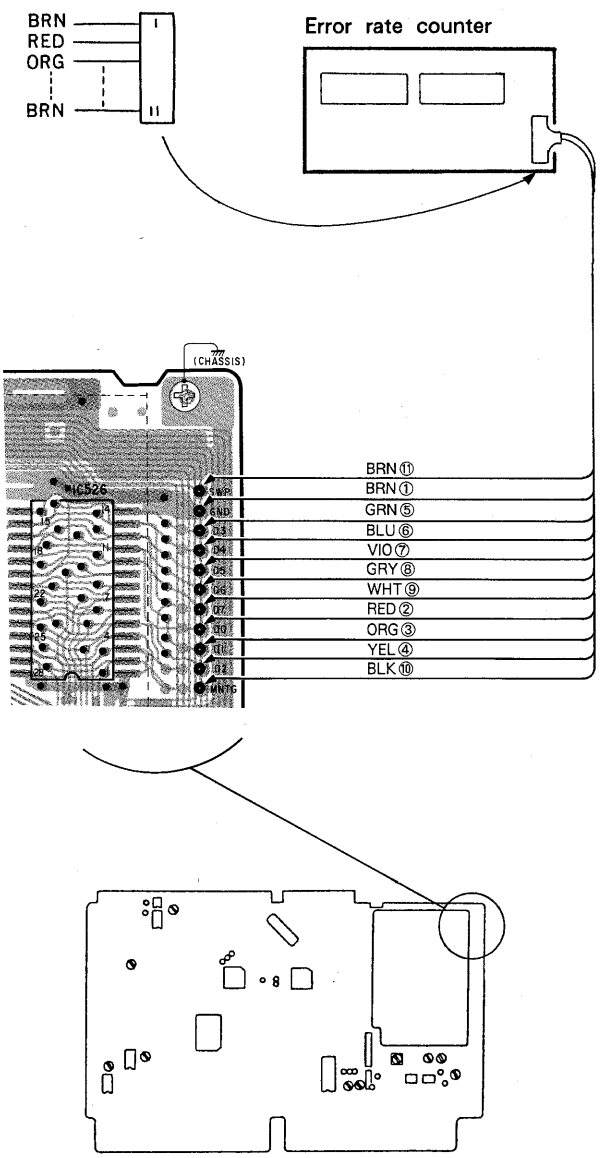
**Condition:**Error rate counter setting

Mode·····PCM-C1
Sampling·····Fast
Input·····Front

**Adjustment:**

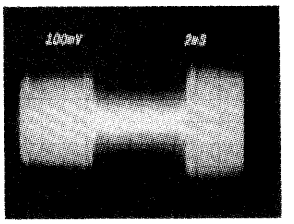
1. Insert test tape TY-7551 and put the set into the loading mode.
2. Put the set into the PLAY mode and measure the error rate.
3. Adjust RV901 and RV902 if the error rate is not within the adjustment value.

**Adjustment value:**$10 \times 10^{-3}$ or less
**Error rate counter:**Connected to main board.

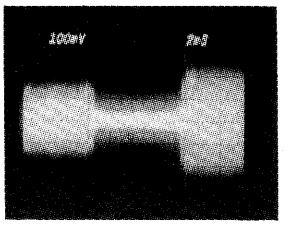



**When there is no error rate counter, adjust as follows:**

1. Insert test tape TY-7551 and put the set into the loading mode.
2. Adjust RV901 and RV902 so that the noise level of the waveform(containing no RF signal)at TP529(AMP.RF)is between the maximum and minimum.

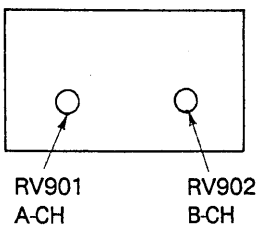


Noise is maximized.



Noise is minimized.

Adjustment Point : RF board

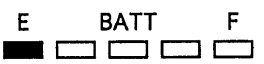



**BATT Level Adjustment**

**Adjustment:**

1. Put the set into TEST mode.
2. Insert music tape and put the set into the loading mode. (press the STOP button.)
3. Put at play mode with minimum volume, connect the headphone, and adjust power voltage so that voltage between TP801(+)and TP802(GND)becomes 5.7V ± 0.01V.
4. Adjust RV509 so that BATT level meter reaches the adjustment value and right after the alarm works and alarm sound is output.

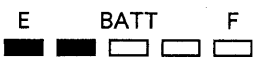
Set this just before starting flash.




Change to this right after fliekering starts.
(Alarm sound is output at this moment from the both channels.)

5. Confirm that the BATT level meter lights as undermentioned, in case voltage between TP801(+)and TP802(GND)is set at 5.75V ± 0.01V. (Also confirm that the alarm sound is out at this moment.)

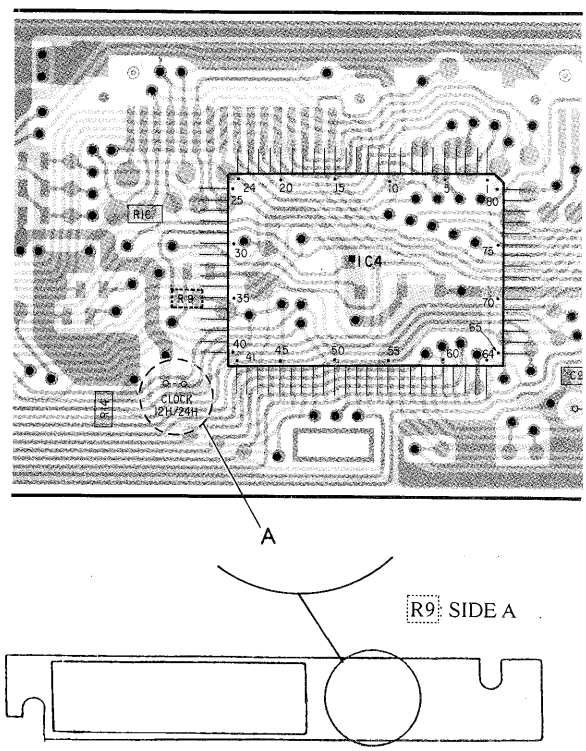
**Adjustment Location:**Main board



**[Clock Display]**

1. For 12-hour display, open the "A" pattern tap.
2. When 24H display, bridge the "A" pattern tap by soldering and remove R9.
3. When changing from 24H to 12H display, mount the R9 and open the "A" pattern.

**Adjustment Location:**SYSCON board



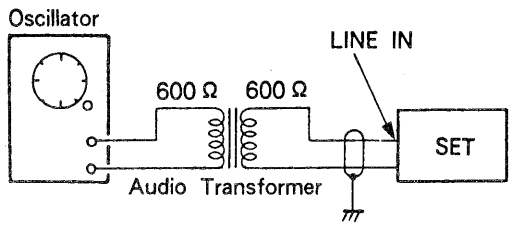

[512 fs Adjustment]

Adjustment :

1. Put the set into TEST mode state.
2. Insert test tape TY-30B (blank tape) and put the set into the loading mode (press the STOP button).
3. Connect the frequency counter to TP901.
   Solder bridge for the taps of C651 and C652 so that the oscillation frequency of TP901 can be within the adjustment value in the STOP mode.
   (As the taps are soldered bridge, the oscillation frequency becomes low.)

**Adjustment value : 24.57560 MHz ~ 24.57640 MHz**

**A/D Level Adjustment**
**Adjustment:**

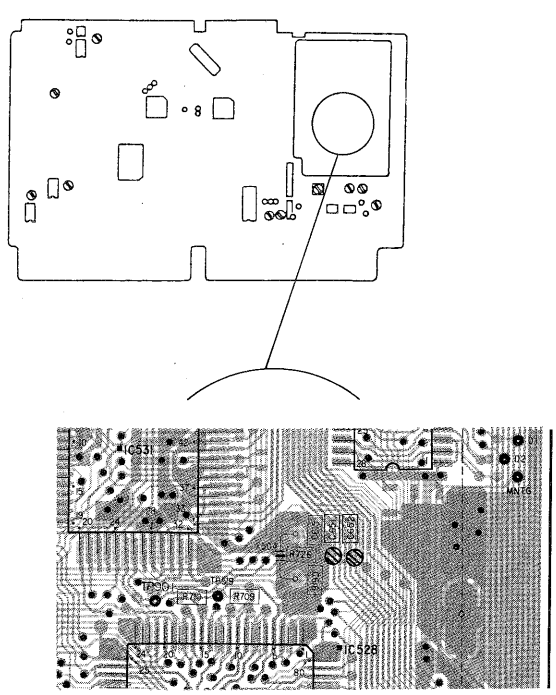



* 0dBs = 0.775Vrms

1. Put the set into TEST mode.
2. Set the INPUT SELECT switch on the right side panel to LINE and set the REC LEVEL control to MAX.
3. Supply a 1kHz signal(+12 dBs)from the oscillator.
4. Turn on the POWER switch and insert test tape TY-30B(blank tape.)
5. Put the set into the REC or REC PAUSE mode.
6. Turn analog board RV102(L-CH)and RV202(R-CH)until the OVER display on the level meter lights.
7. Turn RV102(L-CH)and RV202(R-CH)to the point where the OVER display on the level meter goes off.

**Adjustment Location:**Analog board

**Adjustment Location : Main board**



# 4. ERROR CODE

| Code | Contents | Process |
|---|---|---|
| 01 | End sensor error in Take-up reel | ALL MOTORS STOP |
| 02 | End sensor error in Supply reel | ALL MOTORS STOP |
| 03 | Protocol check error | |
| 04 | Mechanism control BUSY error A | |
| 05 | Mechanism control BUSY error B | |
| 06 | Signal processing IC SBSY error | UNLOADING |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Code | Contents | Process |
|---|---|---|
| 11 | Voltage in Supply reel is high | UNLOADING |
| 12 | Voltage in Supply reel is low | UNLOADING |
| | | |
| 14 | Position sensor error | ALL MOTORS STOP |
| 15 | Error due to high voltage in Supply reel and position sensor error | ALL MOTORS STOP |
| 16 | Error due to low voltage in Supply reel and position sensor error | ALL MOTORS STOP |
| | | |
| 18 | Condensation | UNLOADING |
| 19 | Condensation and high voltage in Supply reel | UNLOADING |
| 1A | Condensation and low voltage in Supply reel | UNLOADING |
| | | |
| 1C | Condensation and position sensor error | ALL MOTORS STOP |
| 1D | Condensation, high voltage in Supply reel and position sensor error | ALL MOTORS STOP |
| 1E | Condensation, low voltage in Supply reel and position sensor error | ALL MOTORS STOP |
| | | |

| Code | Contents | Process |
|---|---|---|
| 21 | Loading is not completed within 12 seconds | UNLOADING |
| 22 | Unloading is not completed within 12 seconds | ALL MOTORS STOP |
| | | |
| 24 | Transferring from STOP to FWD position is not performed within 2 seconds | UNLOADING |
| | | |
| | | |
| | | |
| 28 | Transferring from FWD to STOP position is not performed within 2 seconds | ALL MOTORS STOP |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**[REEL ERROR]**

| Code | Contents | Process |
|---|---|---|
| 31 | No Take-up reel FG | UNLOADING |
| 32 | Take-up reel FG too high | UNLOADING |
| 33 | Take-up reel FG too low | UNLOADING |
| | | |
| | | |
| | | |
| | | |
| 38 | No Supply-reel FG | UNLOADING |
| 39 | Supply-reel FG too high | UNLOADING |
| 3A | Supply-reel FG too low | UNLOADING |
| 3B | Supply-reelFG was less than 2 at the end of loading (on cassette) | UNLOADING |
| 3C | Supply-reel FG was less than 2 at the end of unloading (on cassette) | ALL MOTORS STOP |
| 3D | Supply-reel FG was not so high at the end of loading (no cassette) | UNLOADING |
| 3E | Supply-reel FG was not so high at the end of unloading (no cassette) | ALL MOTORS STOP |
| | | |

**[DRUM ERROR]**

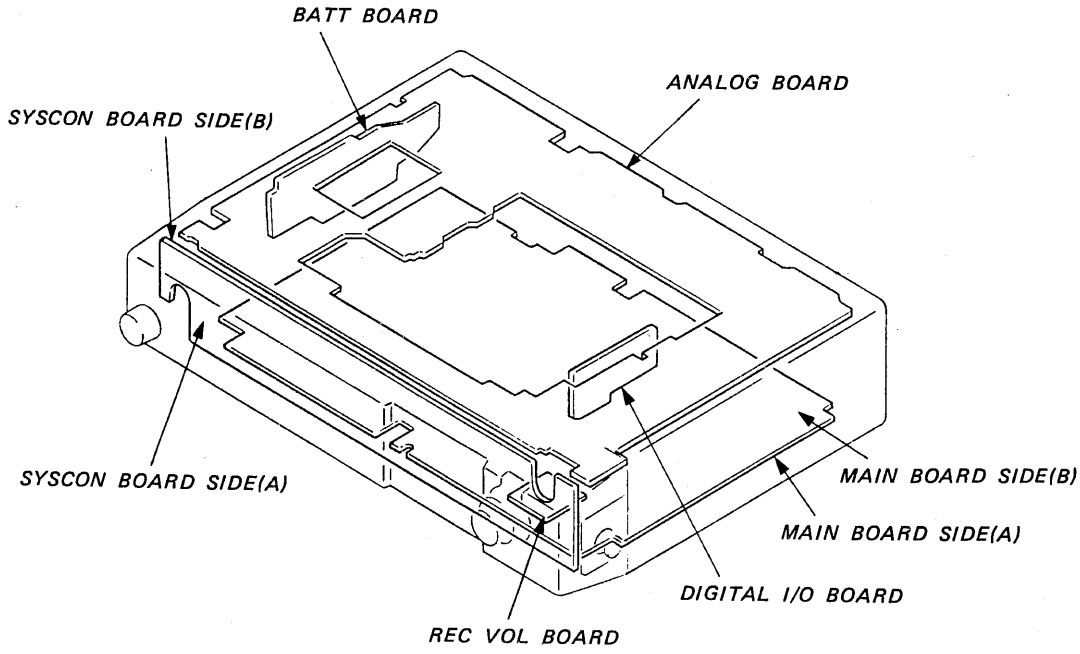
| Code | Contents | Process |
|---|---|---|
| 41 | Drum swp didn't toggle more than 4 times for 0.6 sec after drum was on | UNLOADING |
| 42 | Drum just lock timeout at transition stage | UNLOADING |
| 43 | Drum unlock at stationary stage | UNLOADING |
| 44 | Drum period is more than 5,040 rpm | UNLOADING |
| 45 | Drum period is less than 60 rpm | UNLOADING |
| 46 | Drum slows down too fast | UNLOADING |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

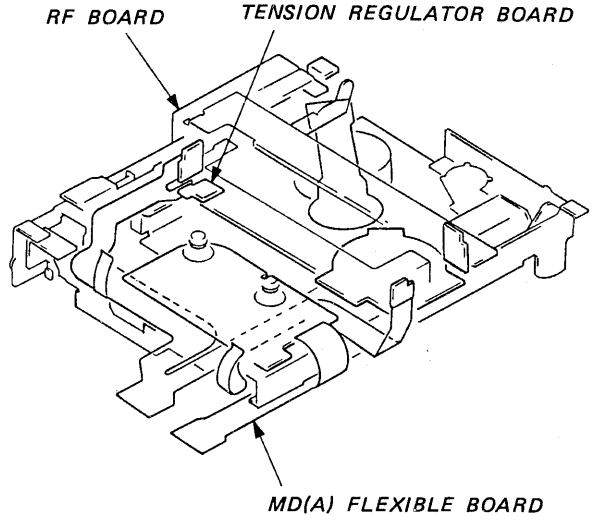
**[CAPSTAN ERROR]**

| Code | Contents | Process |
|---|---|---|
| 51 | Capstan speed ramp too slow | UNLOADING |
| 52 | Capstan speed ramp too fast | UNLOADING |
| 53 | Capstan speed too high only speed servo | UNLOADING |
| 54 | Capstan speed too low only speed servo | UNLOADING |
| 55 | Capstan speed too high on phase servo | UNLOADING |
| 56 | Capstan speed too low on phase servo | UNLOADING |
| 57 | Capstan speed too high on atf servo | UNLOADING |
| 58 | Capstan speed too low on atf servo | UNLOADING |
| | | |
| 5A | Capstan direction signal was not generated | UNLOADING |
| | | |
| | | |
| | | |
| | | |
| | | |

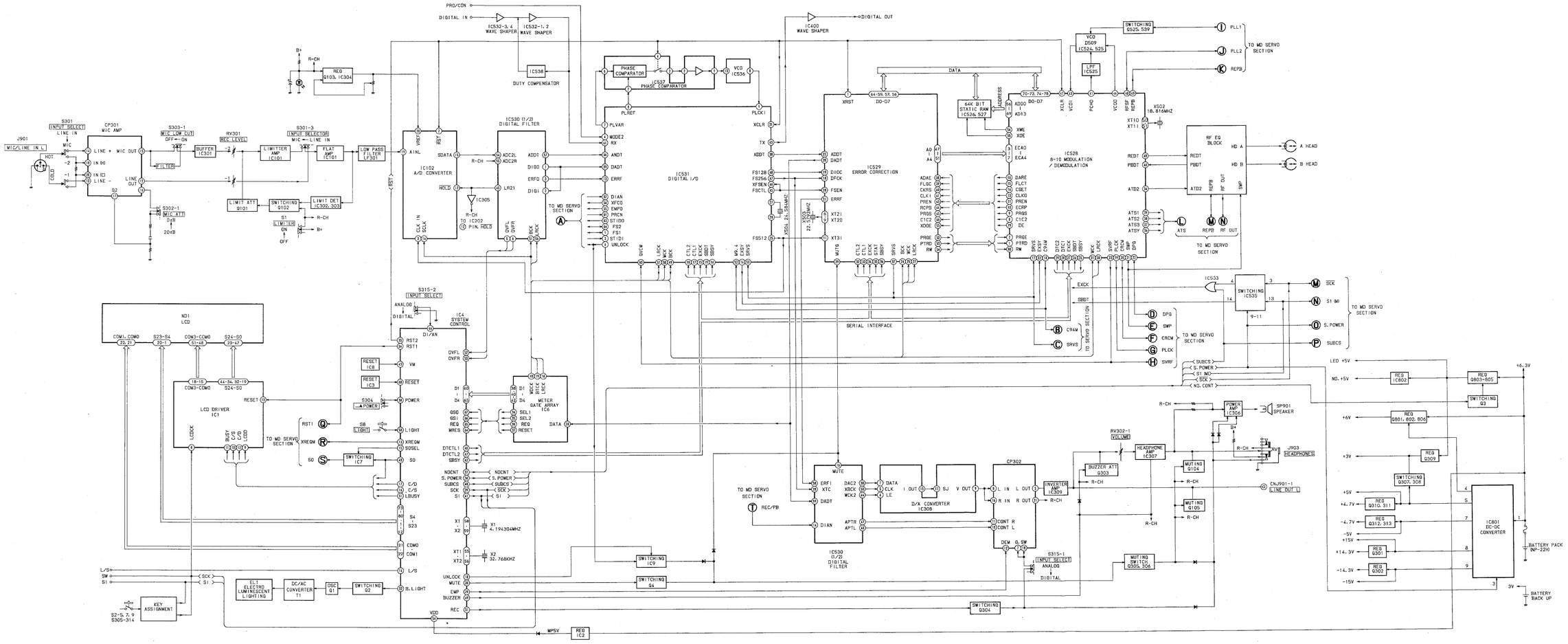
# 5. DIAGRAMS

## 5-1. CIRCUIT BOARDS LOCATION

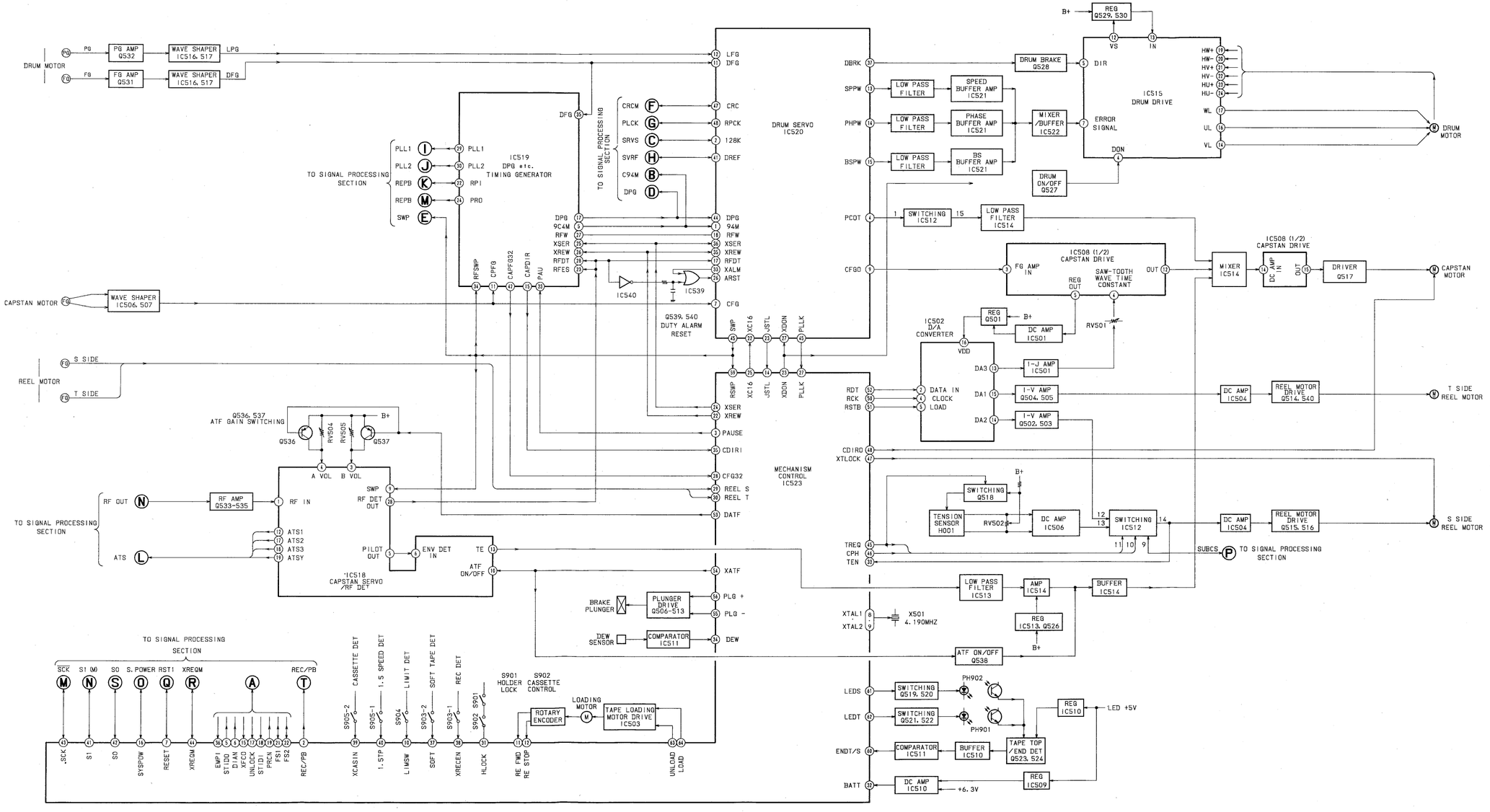


## 5-2. BLOCK DIAGRAM — SIGNAL PROCESSING SECTION —



## 5-3. BLOCK DIAGRAM — MD SERVO SECTION —

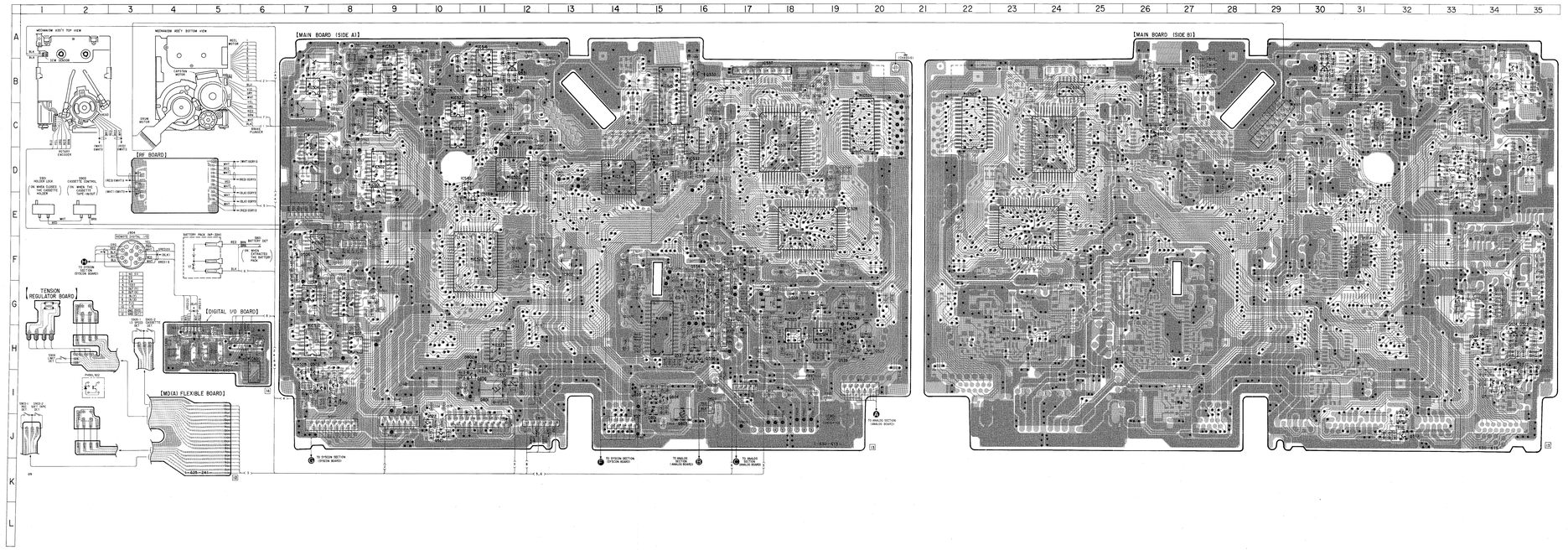


## 5-4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM
### — MAIN SECTION —


- See page 48 for notes.
- See page 73 for Semiconductor Lead Layouts.


**Semiconductor Location (MAIN)**

| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D501 | I-8 | Q507 | I-7 |
| D502 | H-35 | Q508 | H-7 |
| D504 | H-34 | Q509 | H-7 |
| D506 | F-7 | Q510 | I-34 |
| D507 | B-31 | Q511 | I-34 |
| D508 | G-20 | Q512 | H-35 |
| D509 | G-18 | Q513 | H-34 |
| D510 | G-26 | Q514 | B-34 |
| D801 | J-15 | Q515 | B-34 |
| D802 | H-11 | Q516 | B-8 |
| | | Q517 | D-7 |
| IC400 | H-6 | Q518 | G-33 |
| IC501 | D-9 | Q519 | J-32 |
| IC502 | D-9 | Q520 | I-32 |
| IC503 | F-7 | Q521 | J-10 |
| IC504 | B-7 | Q522 | J-10 |
| IC506 | G-8 | Q523 | G-35 |
| IC507 | H-8 | Q524 | G-35 |
| IC508 | D-7 | Q525 | H-20 |
| IC509 | F-7 | Q526 | A-33 |
| IC510 | H-7 | Q527 | C-27 |
| IC511 | G-7 | Q528 | C-27 |
| IC512 | C-8 | Q529 | B-26 |
| IC513 | A-9 | Q530 | B-16 |
| IC514 | B-9 | Q531 | B-12 |
| IC515 | B-15 | Q532 | B-30 |
| IC516 | A-11 | Q533 | G-16 |
| IC517 | B-11 | Q534 | F-16 |
| IC518 | G-15 | Q535 | G-16 |
| IC519 | D-14 | Q536 | H-16 |
| IC520 | D-12 | Q537 | H-16 |
| IC521 | C-11 | Q538 | B-33 |
| IC522 | B-11 | Q539 | H-19 |
| IC523 | F-11 | Q540 | C-7 |
| IC524 | H-19 | Q801 | I-11 |
| IC525 | G-18 | Q802 | I-12 |
| IC526 | B-20 | Q803 | J-16 |
| IC527 | B-22 | Q804 | I-15 |
| IC528 | E-20 | Q805 | I-15 |
| IC529 | F-23 | Q806 | I-11 |
| IC530 | C-24 | | |
| IC531 | C-18 | | |
| IC532 | C-16 | | |
| IC533 | I-12 | | |
| IC535 | H-11 | | |
| IC536 | B-24 | | |
| IC537 | A-18 | | |
| IC538 | D-16 | | |
| IC539 | E-11 | | |
| IC540 | D-11 | | |
| IC801 | J-19 | | |
| IC802 | F-13 | | |
| | | | |
| PH901 | J-2 | | |
| PH902 | G-2 | | |
| | | | |
| Q501 | E-34 | | |
| Q502 | D-34 | | |
| Q503 | C-33 | | |
| Q504 | D-33 | | |
| Q505 | D-34 | | |
| Q506 | I-8 | | |














**Note on Mounting Diagram:**

- ○——: parts extracted from the component side.
- ——○: parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.

**Note on Schematic Diagram:**

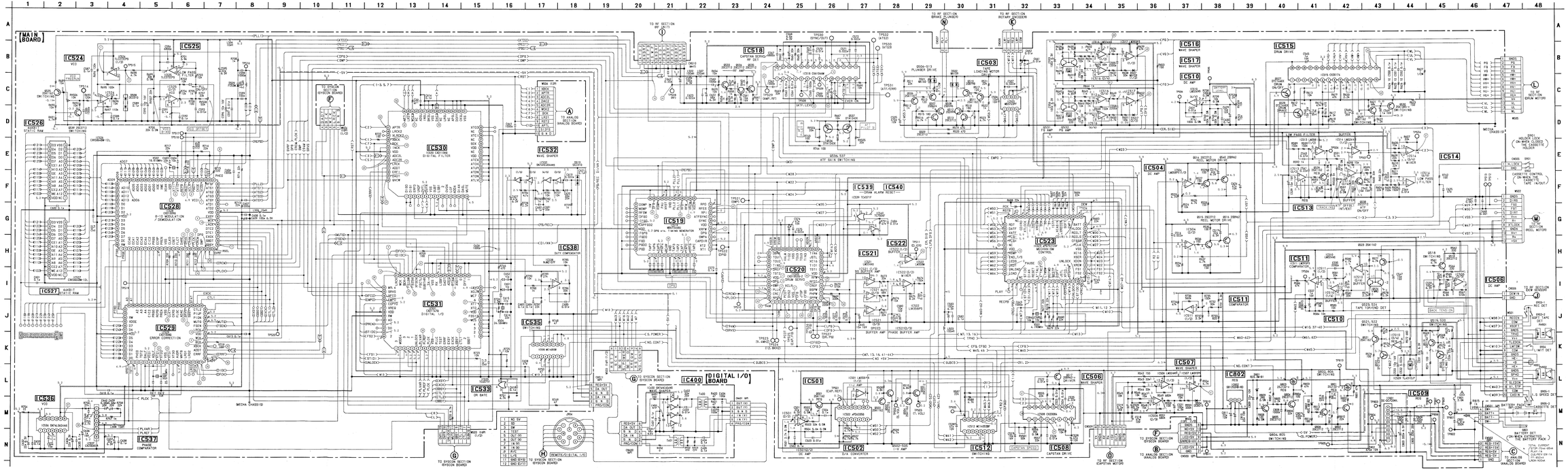
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.

| Note: | Note: |
|---|---|
| The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified. | Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié. |

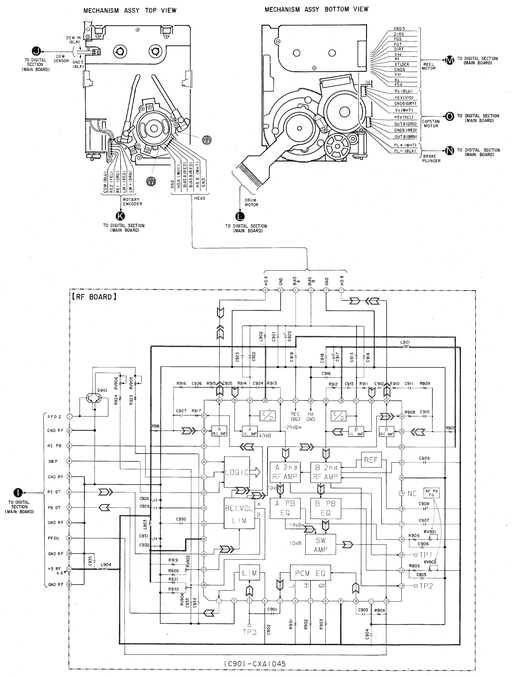
- ⏚ : ⏚ B+ Line
- ⏚ : ⏚ B– Line
- [ ] : adjustment for repair.
- Total current is measured with no cassette installed.
- Supply 6.3 Vdc from the battery terminal as regulated power voltage.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : STOP Mode
  ( ) : REC Mode
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ∑〉 : PB
  ∑〉 : REC

• See page 48 for notes.





## — RF SECTION —




**Note on Mounting Diagram:**

- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒▒▒ : Pattern on the side which is seen.
- ▒▒▒ : Pattern of the rear side.

**Note on Schematic Diagram:**

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.
- ═══ : B+ Line
- ═══ : B− Line
- [———] : adjustment for repair.
- Supply 6.3 Vdc from the battery terminal as regulated power voltage.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: STOP Mode
- Voltages are taken with a VOM (Input impedance 10MΩ)
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▷ : PB
  ▷▷ : REC

**Semiconductor Location (Analog)**

| Ref. No. | Location |
|---|---|
| D101 | D-17 |
| D102 | D-17 |
| D103 | E-16 |
| D104 | D-16 |
| D105 | D-17 |
| D106 | C-16 |
| D107 | D-17 |
| D108 | D-17 |
| D109 | C-14 |
| D110 | C-11 |
| D201 | B-18 |
| D202 | B-17 |
| D203 | B-17 |
| D204 | B-17 |
| D205 | C-17 |
| D206 | C-18 |
| D207 | C-17 |
| D208 | B-18 |
| D209 | A-14 |
| D210 | B-11 |
| D303 | K-4 |
| D304 | J-18 |
| D305 | D-6 |
| D306 | J-6 |
| D307 | K-6 |
| D308 | C-6 |
| D901 | D-20 |
| D902 | E-20 |
| IC101 | C-13 |
| IC102 | C-5 |
| IC201 | A-13 |
| IC202 | A-5 |
| IC301 | C-15 |
| IC302 | C-12 |
| IC303 | C-11 |
| IC304 | B-8 |
| IC305 | D-3 |
| IC306 | E-7 |
| IC307 | I-6 |
| IC308 | I-4 |
| IC309 | H-5 |
| Q101 | B-14 |
| Q102 | C-12 |
| Q103 | C-7 |
| Q104 | J-6 |
| Q105 | J-5 |
| Q201 | B-14 |
| Q202 | B-12 |
| Q203 | C-7 |
| Q204 | J-6 |
| Q205 | J-5 |
| Q301 | C-9 |
| Q302 | B-9 |
| Q303 | J-4 |
| Q304 | J-5 |
| Q305 | K-7 |
| Q306 | K-7 |
| Q307 | G-6 |
| Q308 | G-7 |
| Q309 | G-7 |
| Q310 | F-7 |
| Q311 | F-6 |
| Q312 | E-6 |
| Q313 | E-7 |



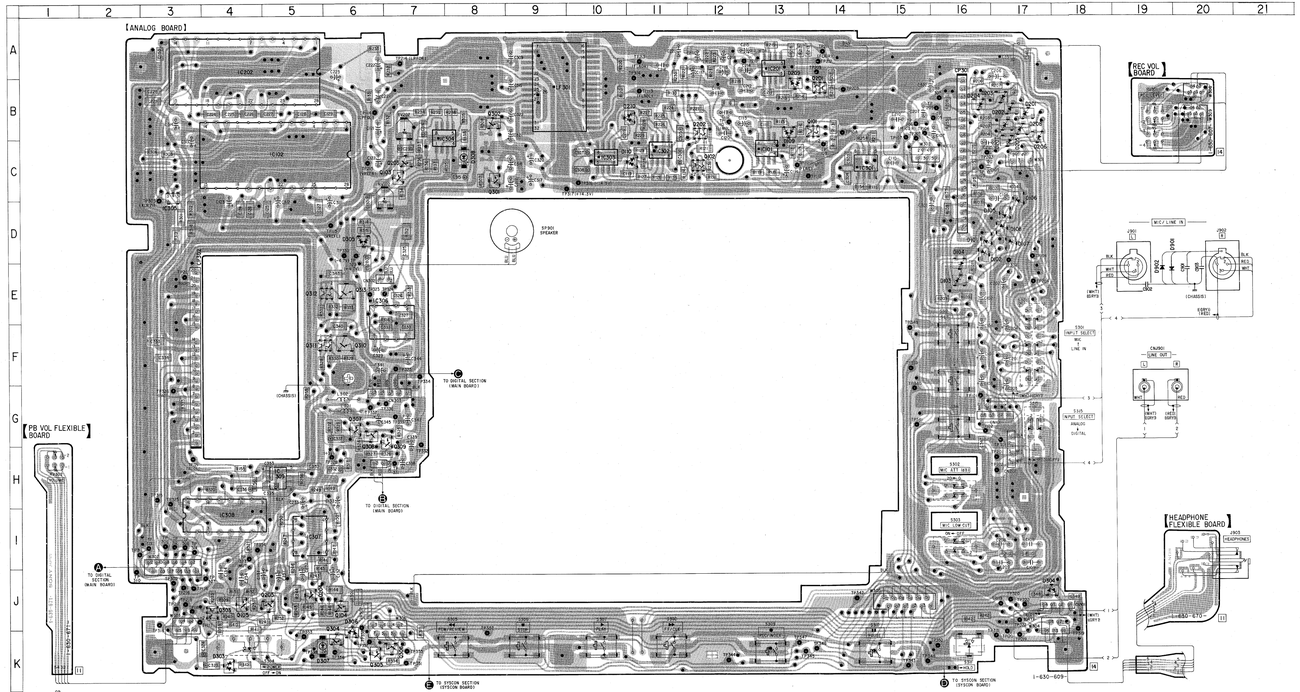


## 5-5. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

## — ANALOG SECTION —


- See page 55 for notes.
- See page 73 for Semiconductor Lead Layouts.

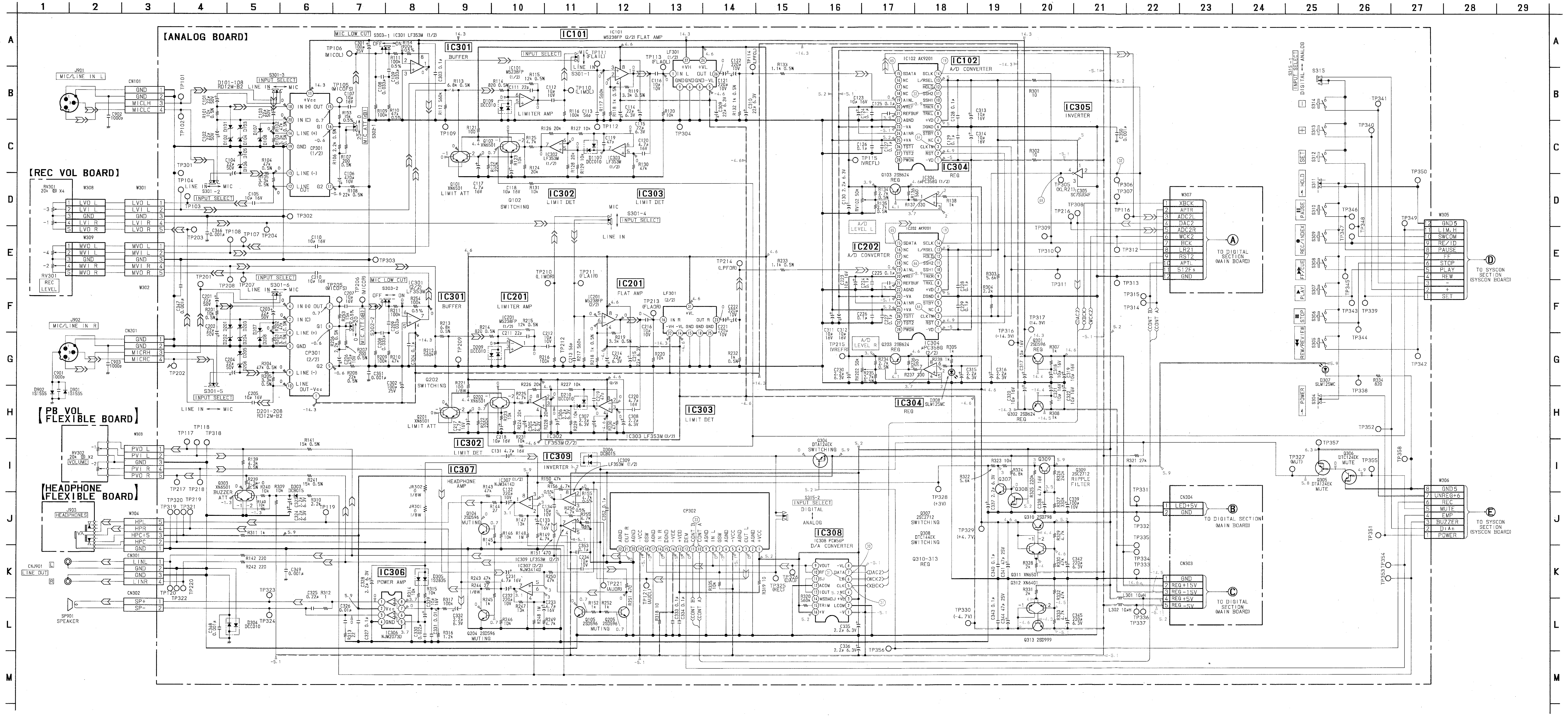


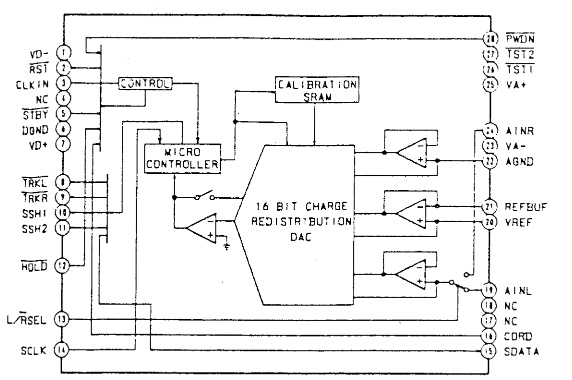
• See page 55 for notes.



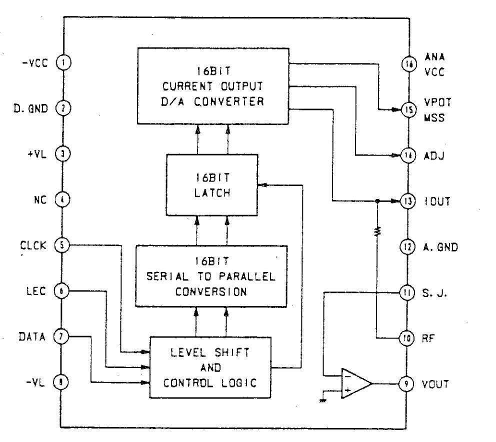




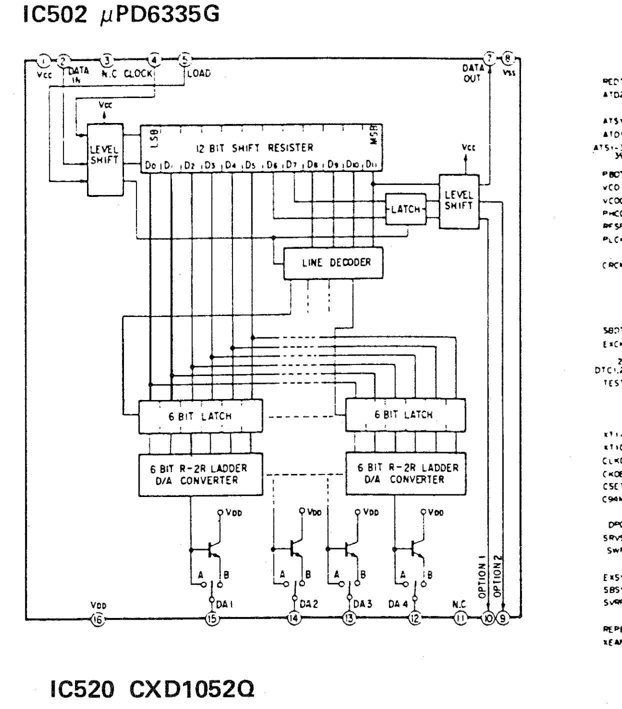
IC102,202 AK9201



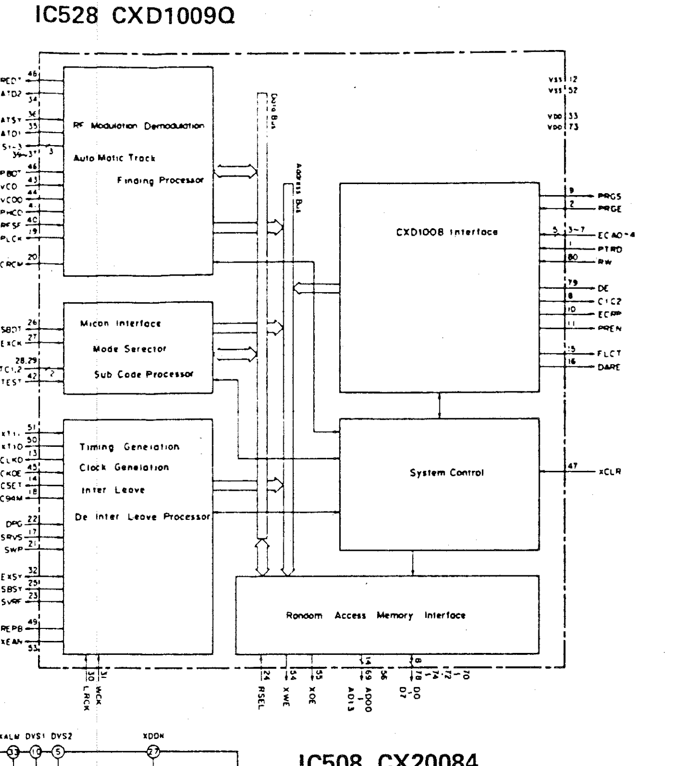
IC308 PCM56P



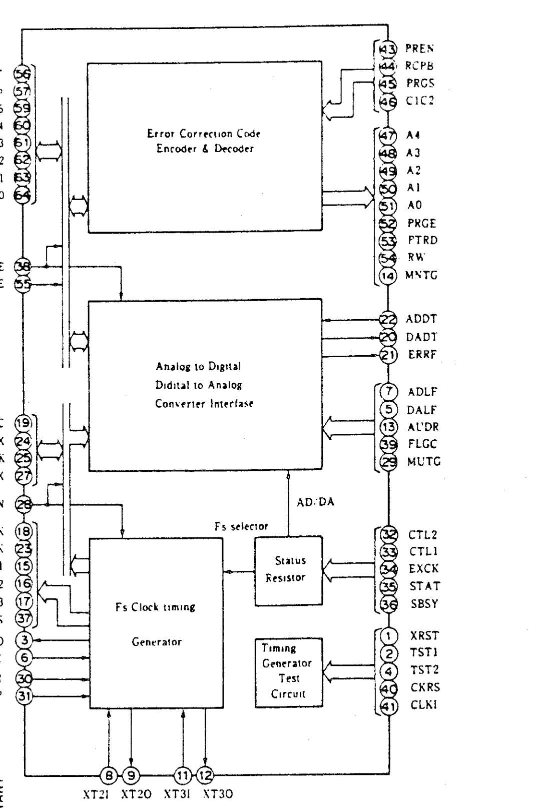
IC502 μPD6335G



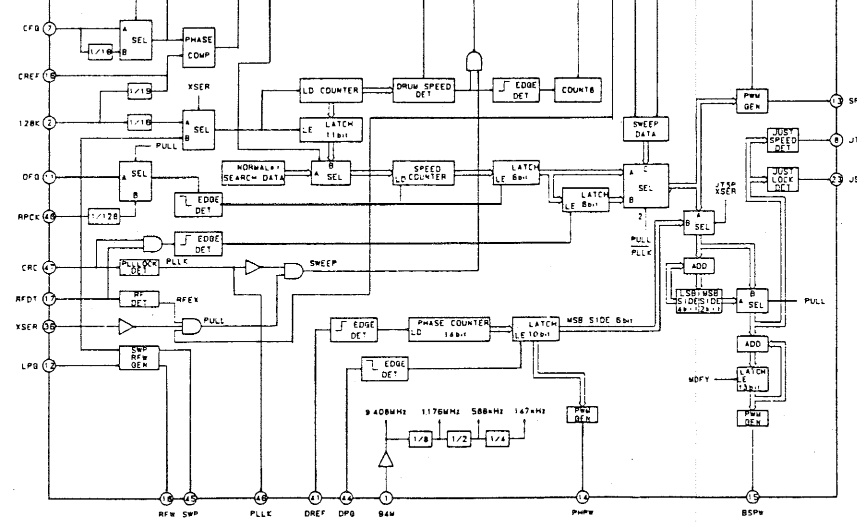
IC528 CXD1009Q



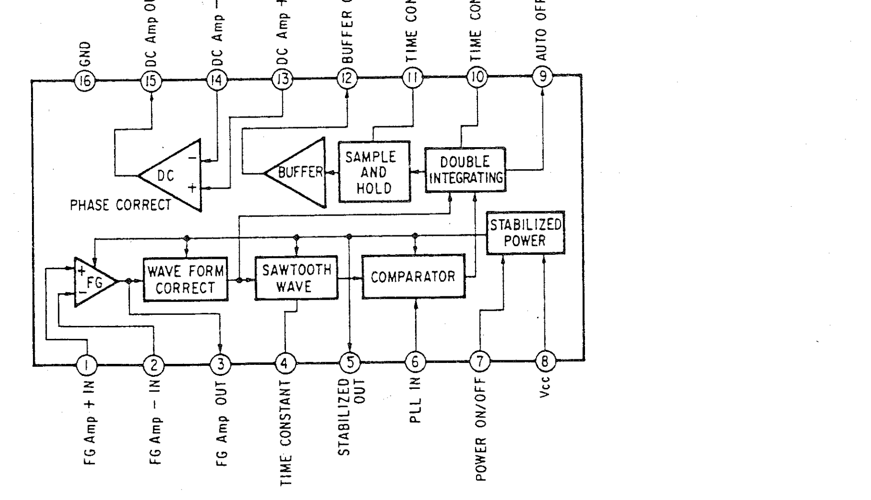
IC529 CXD1008Q



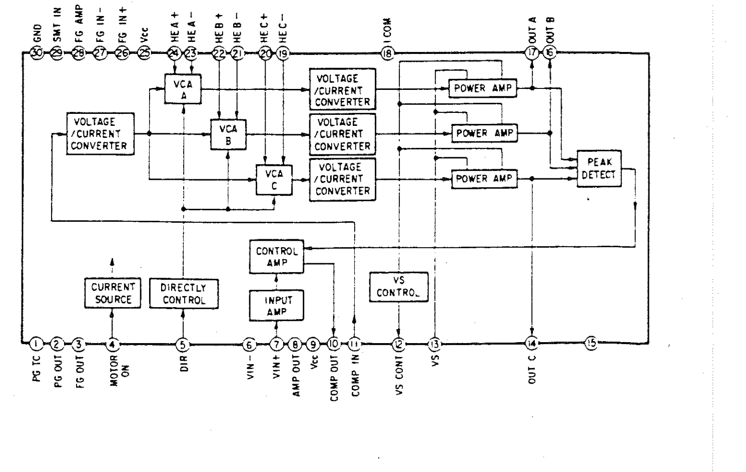
IC520 CXD1052Q



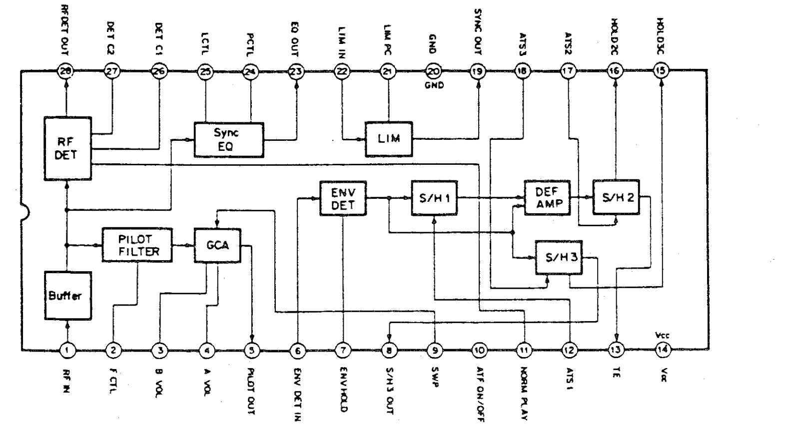
IC508 CX20084



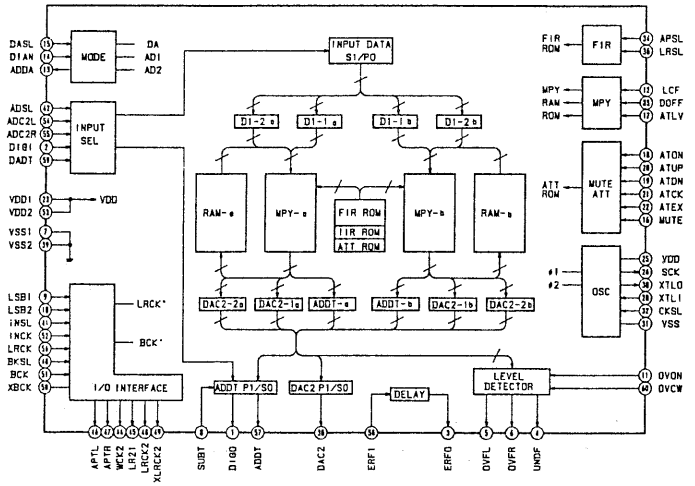
IC515 CX20174



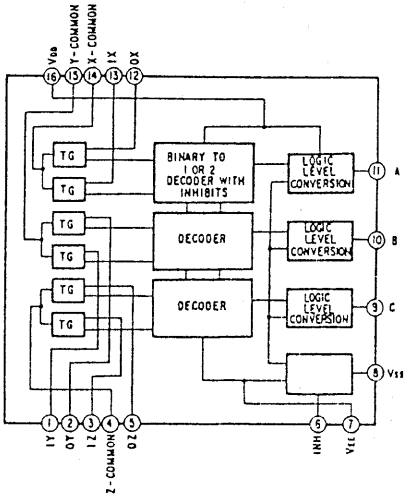
IC518 CXA1046M



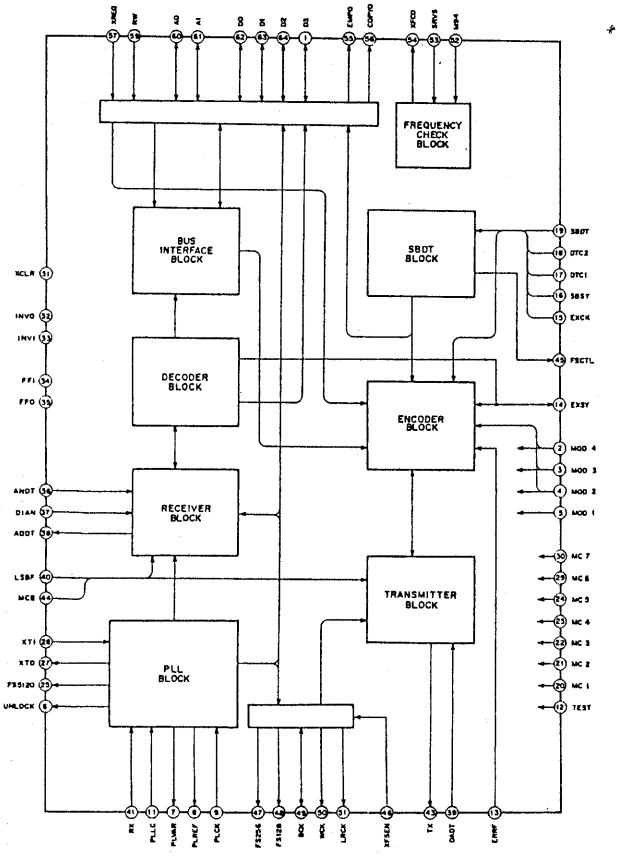
## IC530 CXD1136Q



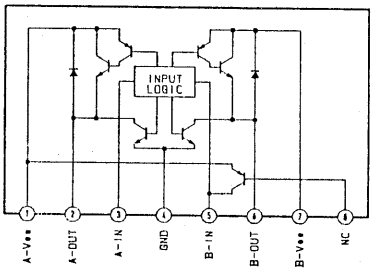

## IC512,535 MC14053BCP



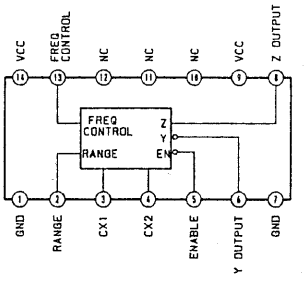

## IC531 CXD1146Q



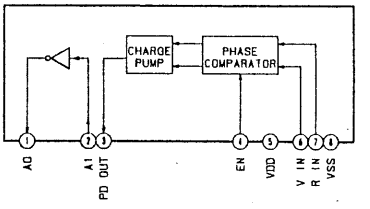

## IC503 MB3763PF




## IC536 SN74LS624




## IC537 CX23065



## 5-6. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

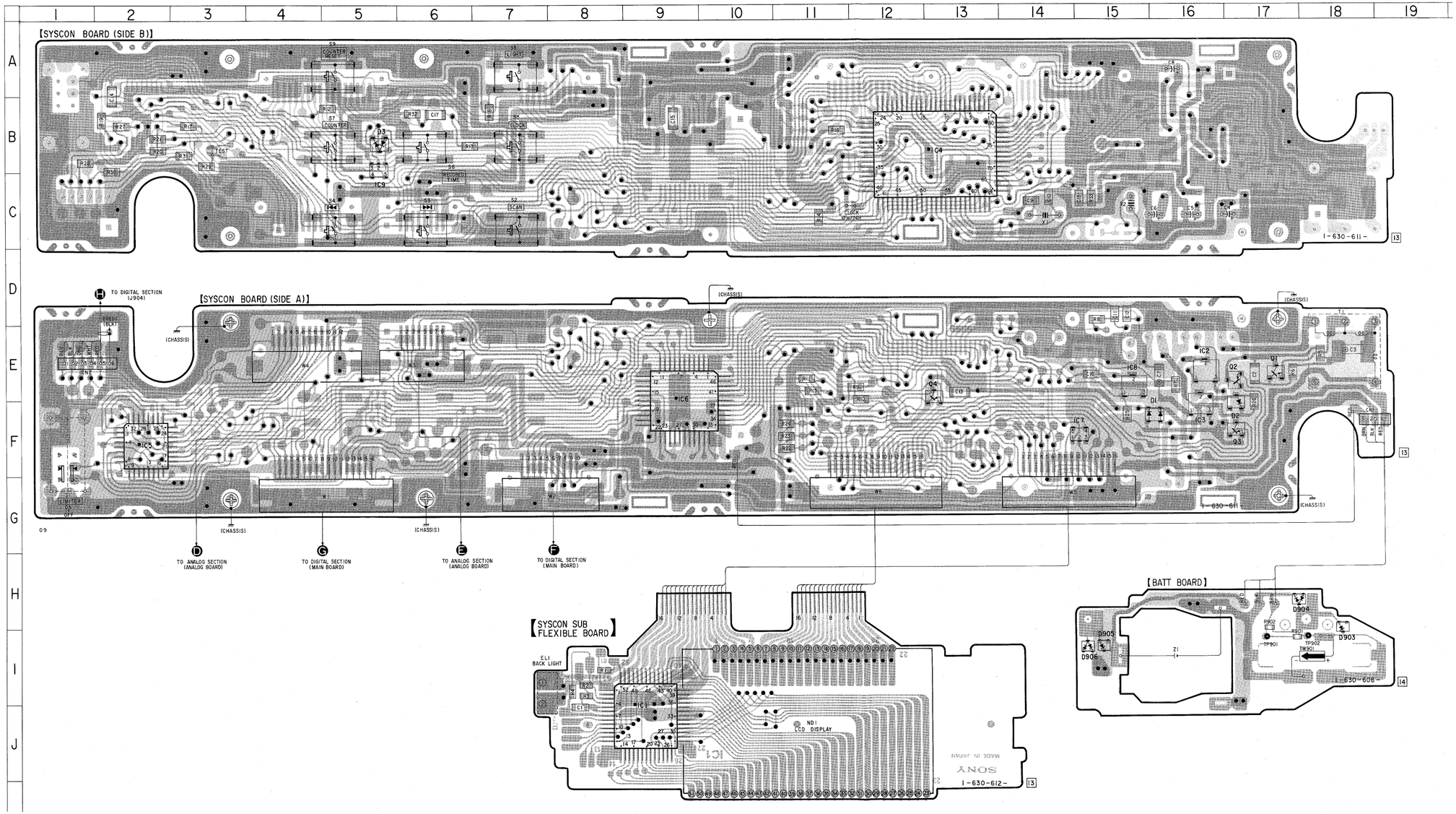
## — SYSTEM CONTROL SECTION —


- See page 72 for notes.
- See page 73 for Semiconductor Lead Layouts.




**Semiconductor Location (System Control)**

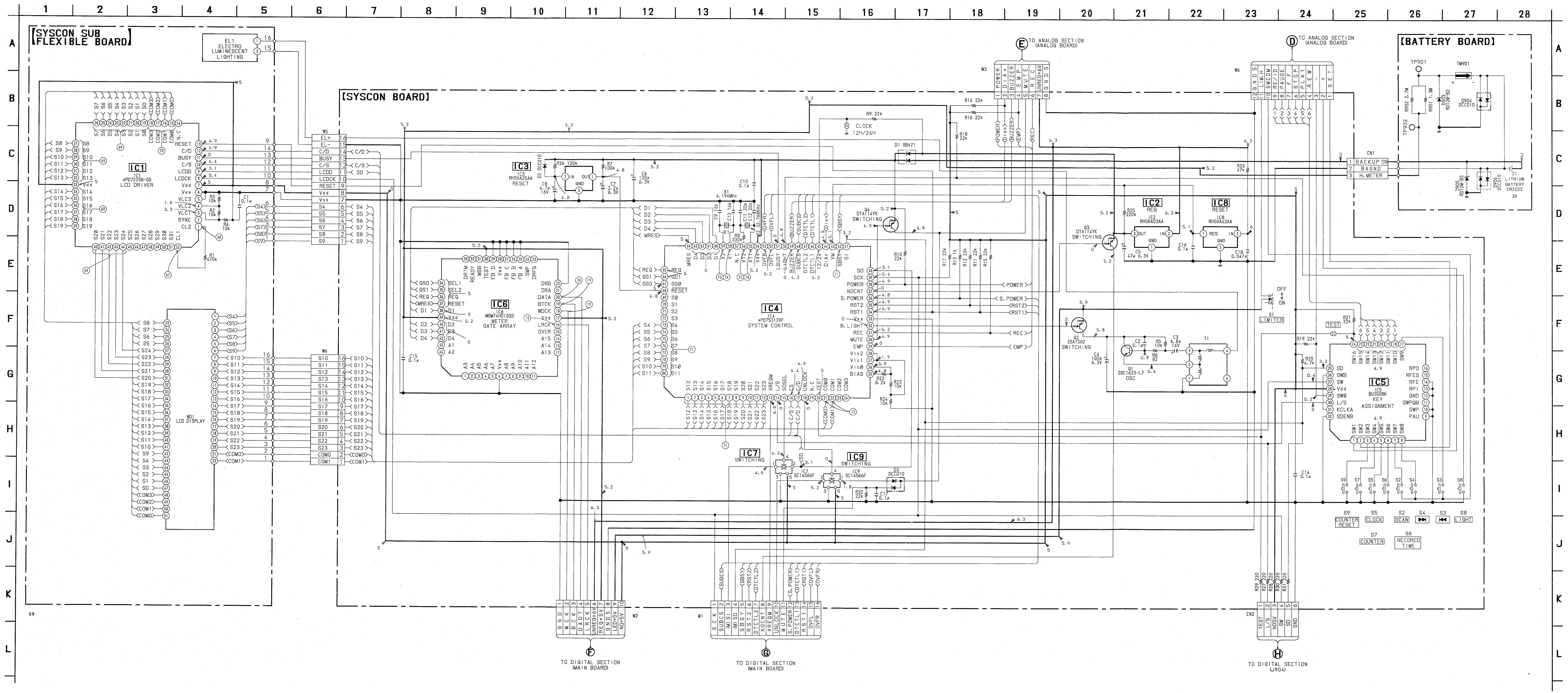
| Ref. No. | Location |
|---|---|
| D1 | F-16 |
| D2 | F-17 |
| D3 | B-5 |
| D903 | I-18 |
| D904 | H-17 |
| D905 | I-15 |
| D906 | I-15 |
| IC1 | I-9 |
| IC2 | E-16 |
| IC3 | F-16 |
| IC4 | B-13 |
| IC5 | F-2 |
| IC6 | E-9 |
| IC7 | F-15 |
| IC8 | E-15 |
| IC9 | C-5 |
| Q1 | E-17 |
| Q2 | E-17 |
| Q3 | F-17 |
| Q4 | E-13 |



• See page 72 for notes.






[SYSCON SUB FLEXIBLE BOARD]
EL1 ELECTRO LUMINESCENT LIGHTING
IC1 IC1 µPD7225G-00 LCD DRIVER
ND1 LCD DISPLAY
[SYSCON BOARD]
IC3 IC3 RH5VA25AA RESET
IC6 IC6 MSM74H010GS METER GATE ARRAY
IC4 IC4 µPD75312GF SYSTEM CONTROL
IC7 SWITCHING IC7 SC14S66F
IC9 SWITCHING IC9 SC14S66F
D3 DCC010
D1 RB471
X1 4.194MHz
X2 32.768kHz
CLOCK 12H/24H
Q4 DTA114YK SWITCHING
Q3 DTA114YK SWITCHING
Q2 2SA1502 SWITCHING
Q1 2SC1623-L7 OSC
IC2 REG IC2 RH5RA53AA
IC8 RESET IC8 RH5VA43AA
IC5 IC5 BU3508K KEY ASSIGNMENT
S1 LIMITER
OFF ON
TEST
S9 COUNTER RESET
S5 CLOCK
S2 SCAN
S4 ▶▶|
S3 |◀◀
S8 LIGHT
S7 COUNTER
S6 RECORED TIME
[BATTERY BOARD]
TP901
TM901
TP902
R902 2.7M
R901 1.3M
D903 RD12M-B2
D904 DCC010
D905 RD12M-B2
D906 DCC010
Z1 LITHIUM BATTERY CR2025 3V
CN1
BACKUP ON
BAGND
H.METER
E TO ANALOG SECTION (ANALOG BOARD)
D TO ANALOG SECTION (ANALOG BOARD)
F TO DIGITAL SECTION (MAIN BOARD)
G TO DIGITAL SECTION (MAIN BOARD)
H TO DIGITAL SECTION (J904)

Note on Mounting Diagram:

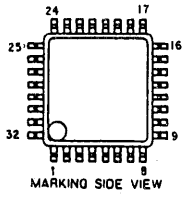
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒ : Pattern on the side which is seen.
- ▒ : Pattern of the rear side.

Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▬▬ : B+ Line
- Supply 6.3 Vdc from the battery terminal as regulated power voltage.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : STOP Mode
- Voltages are taken with a VOM (Input inpedance 10MΩ)
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

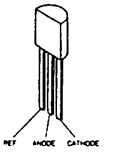
## 5-7. SEMICONDUCTOR LEAD LAYOUTS

**BU3508K**

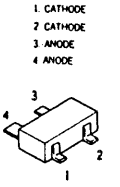



**CX23065**

**TL431CLPB**

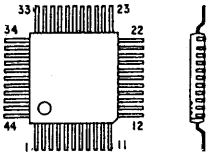


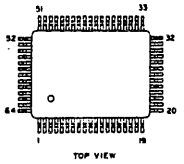

**DWA010**



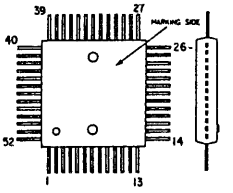

**MSM74H010GS-K**

**CXD1008Q**
**CXD1147Q**
**μPD7512GR**

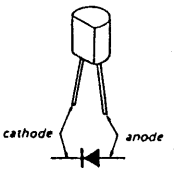




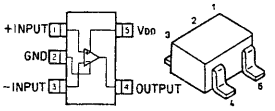

**μPD7225G-00**



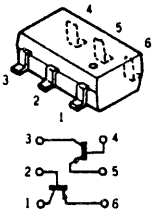
**FC53M**



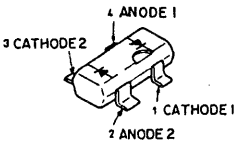

**NJM2107F**



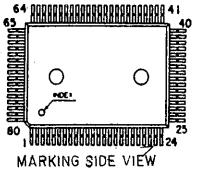

**XN6401**



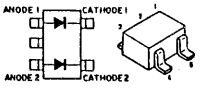
**MA160**




**CXD1009Q**
**μPD75312GF**




**RB471E**

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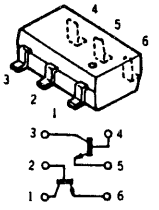
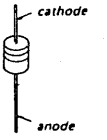
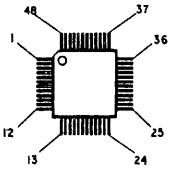


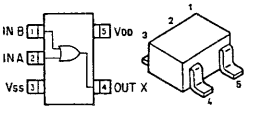
**ISS119**



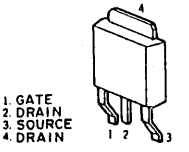

**CXD1052Q-Z**
**MB673468U**



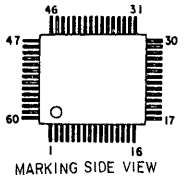
**TC4S71F**



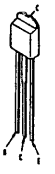

**2SJ132-Z**



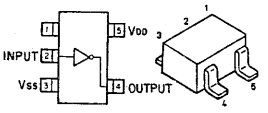

**CXD1136Q**



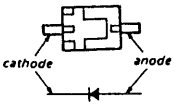

**2SA1385-Z-L**
**2SB962**



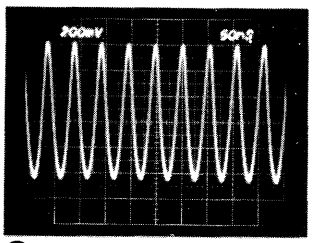
**TC7S04F**



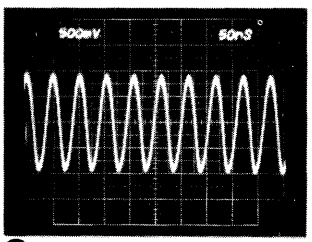

**2SL-125MC**



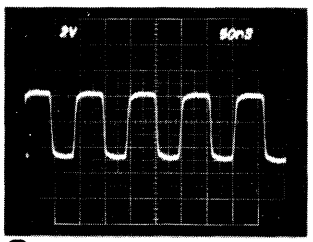
## 5-8. WAVEFORMS



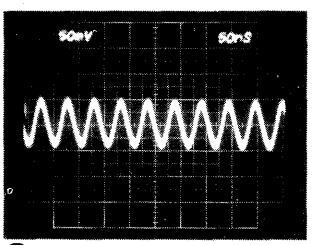
❶ IC524 ⑦ pin



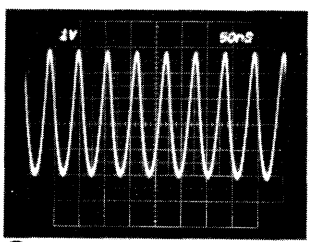
❼ IC528 ㊹ pin (VCOO)



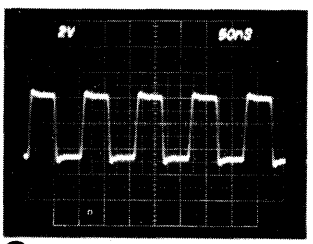
⓭ IC528 ⑱ pin (C94M)



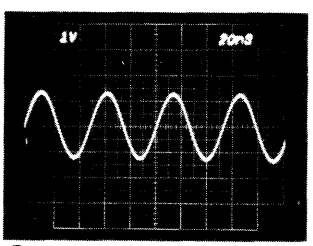
❷ IC524 ⑤ pin (TP515)



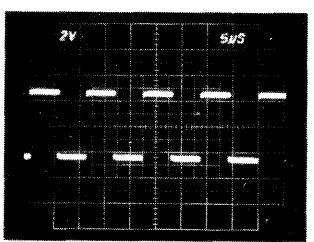
❽ IC528 ㊸ pin (VCOI)



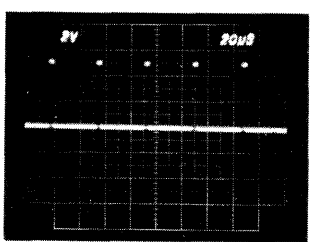
⓮ IC528 ⑲ pin (PLCK)



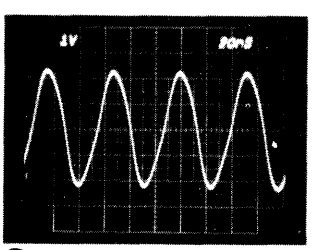
❸ IC528 ㊶ pin (XT1I)



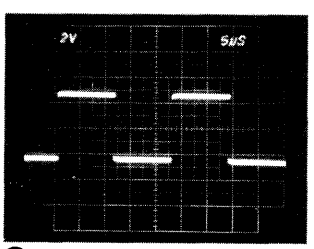
❾ IC529 ㉕ pin (WCK)



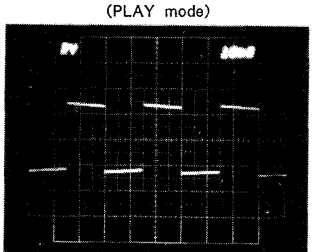
⓯ IC528 ⑳ pin (CRCM)
(PLAY mode)



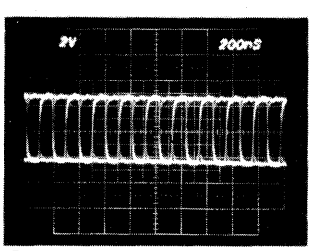
❹ IC528 ㊿ pin (XT1O)



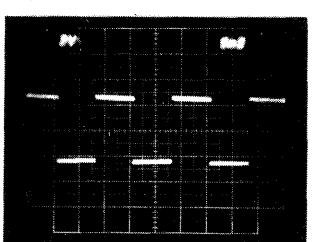
❿ IC529 ㉗ pin (LRCK)



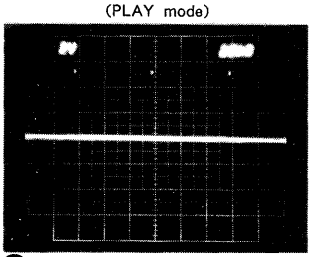
⓰ IC528 ㉑ pin (SWP)
(PLAY mode)



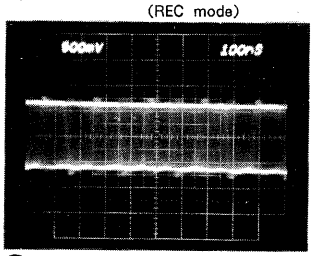
❺ IC528 ㊽ pin (TP517/REDT)
(REC mode)



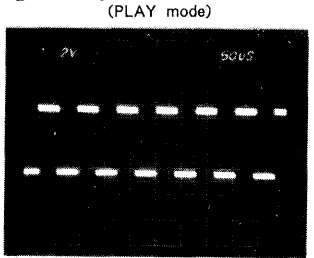
⓫ IC528 ㉕ pin (SBSY)
(PLAY mode)



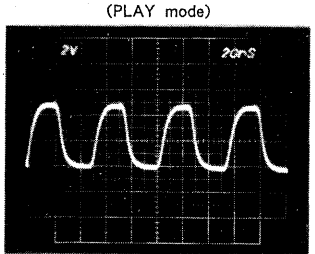
⓱ IC528 ㉒ pin (DPG)
(PLAY mode)



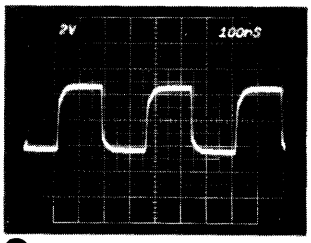
❻ IC528 ㊻ pin (PBDT)
(PLAY mode)



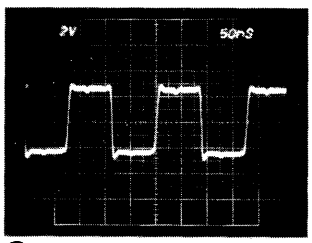
⓬ IC529 ㊲ pin (SRVS)



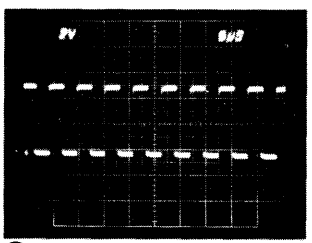
⓲ IC529 ㊶ pin (CLKI)



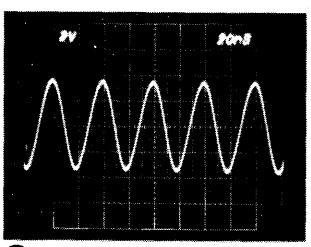

19 IC529 (24) pin (BCK)



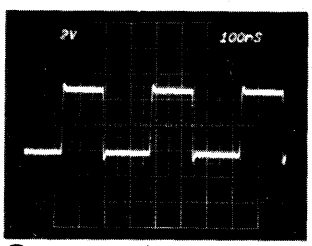

25 IC529 (19) pin (DIOC)



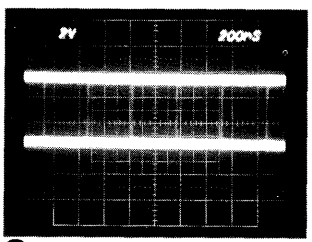

31 IC530 (44) pin (WCK2)



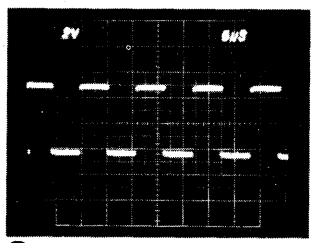

37 IC531 (28) pin (XTI)



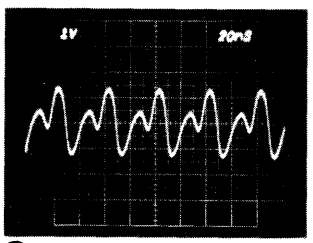

20 IC529 (23) pin (XBCK)



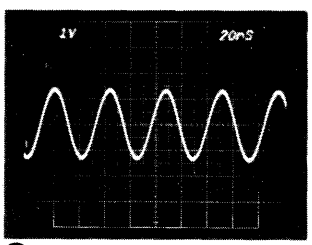

26 IC529 (20) pin (DADT)
(PLAY mode)



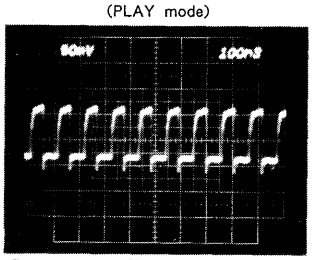

32 IC530 (45) pin (LR2I)



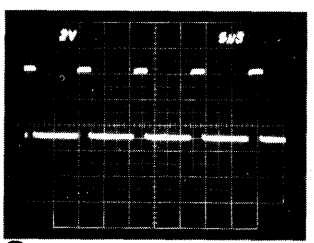

38 IC531 (27) pin (XTO)



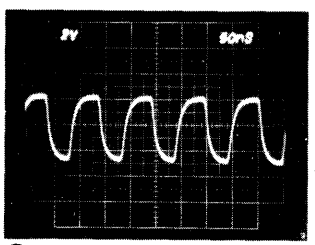

21 IC529 (8) pin (XT2I)



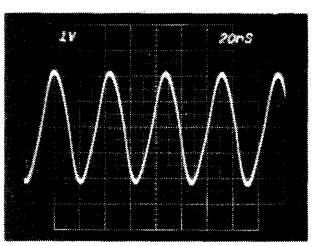

27 IC531 (9) pin (PLCK)



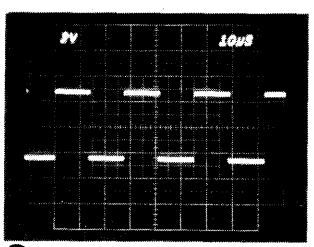

33 IC530 (46) pin (APTL)
IC530 (47) pin (APTR)



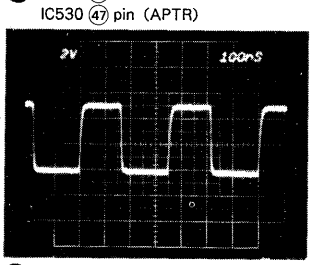

39 IC531 (52) pin (M9.4)



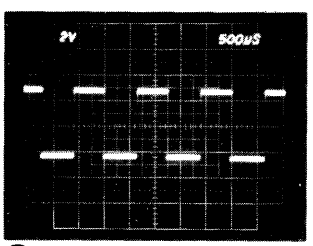

22 IC529 (9) pin (XT2O)



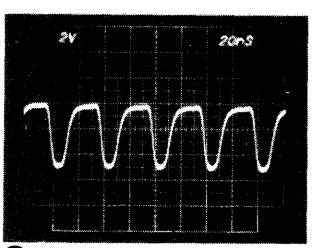

28 IC531 (7) pin (PLVAR)



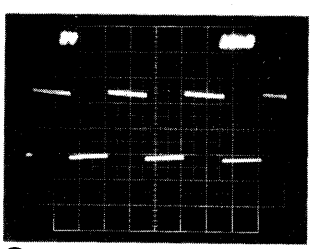

34 IC530 (50) pin (XBCK)



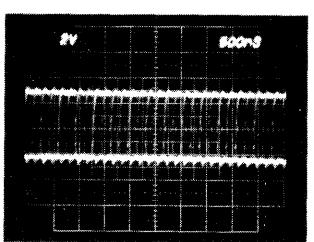

40 IC520 (11) pin (DFG)
(PLAY mode)



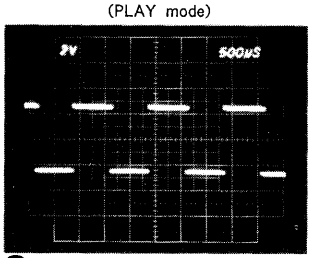

23 IC529 (11) pin (XT3I)



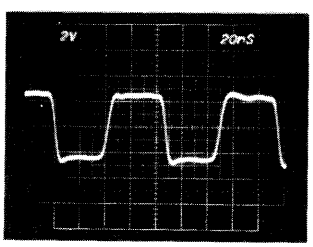

29 IC528 (23) pin (SVRF)



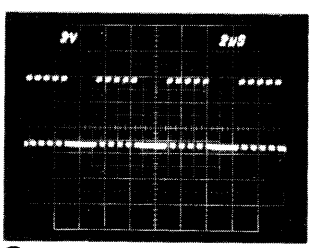

35 IC531 (43) pin (TX) (Difficult to data)
(PLAY mode)



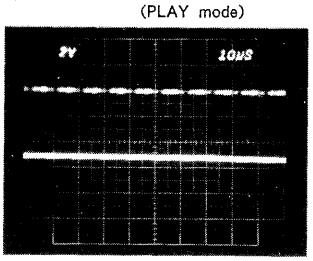

41 IC519 (11) pin (CPFG)
(PLAY mode)



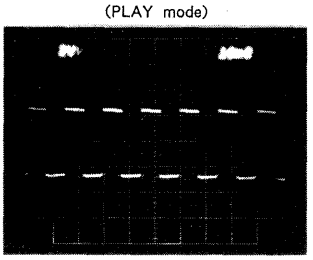

24 IC529 (18) pin (DFCK)



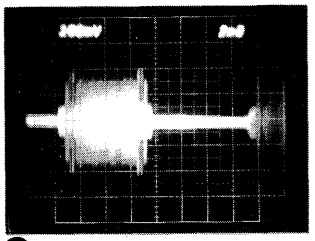

30 IC530 (38) pin (DAC2)



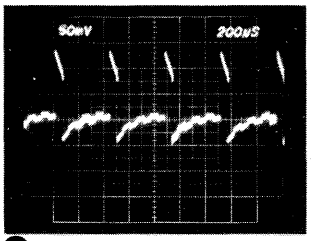

36 IC531 (38) pin (ANDT)
(REC mode)



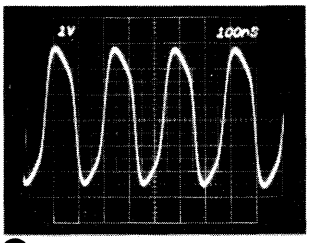
42 IC518 (28) pin
(PLAY mode)



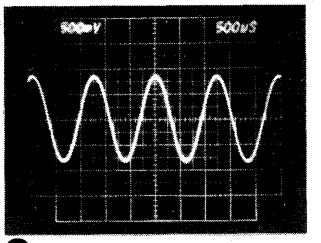
43 IC518 ① pin
(PLAY mode)



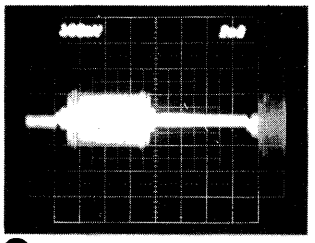
49 IC520 ⑮ pin (BSPW)
(PLAY mode)



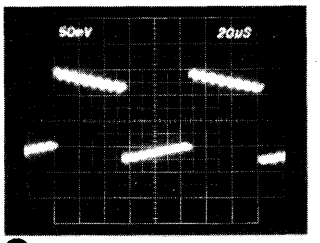
55 IC523 ⑧ pin (X'TAL1)



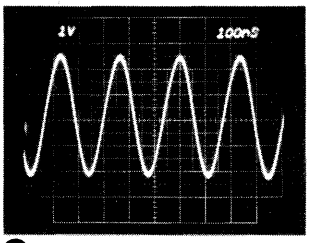
61 IC517 ⑥ pin
(PLAY mode)



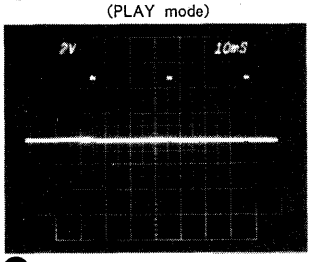
44 TP528 (RF)
(PLAY mode)



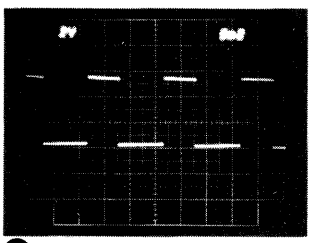
50 IC520 ⑭ pin (PHPW)
(PLAY mode)



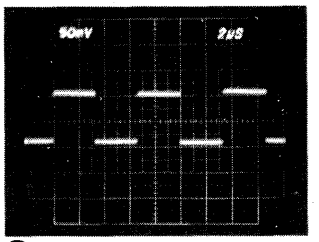
56 IC523 ⑨ pin (X'TAL2)



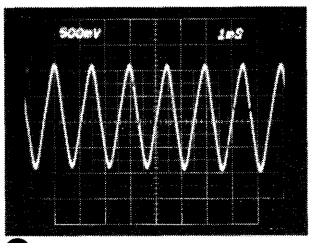
62 IC517 ⑦ pin
(PLAY mode)



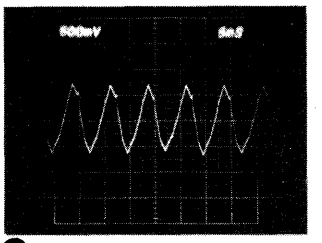
45 IC520 ⑱ pin (RFW)
(PLAY mode)



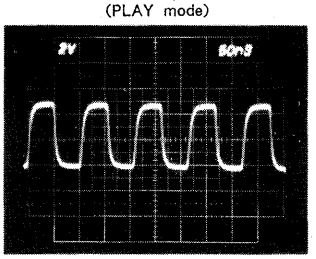
51 IC520 ⑬ pin (SPPW)
(PLAY mode)



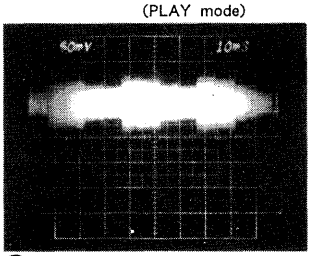
57 IC506 ⑭ pin
(PLAY mode)



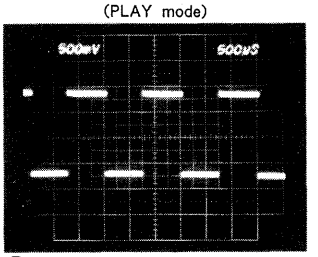
63 IC515 ⑭, ⑯, ⑰ pin
(PLAY mode)



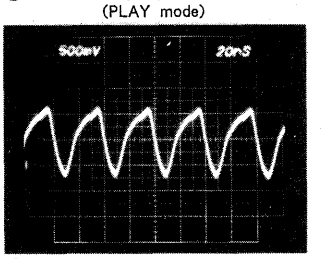
46 IC520 ㊽ pin (RPOK)



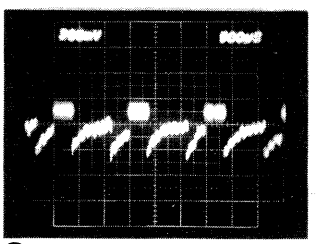
52 IC518 ⑤ pin
(Draw out to pilot signal)



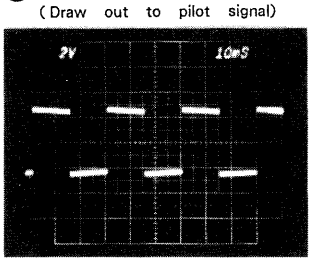
58 IC508 ③ pin
(PLAY mode)



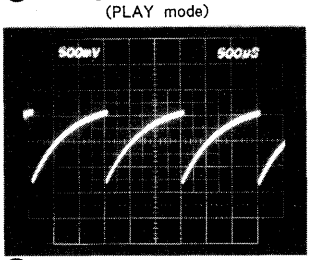
64 IC102, 202 ③ pin
(CLK IN)



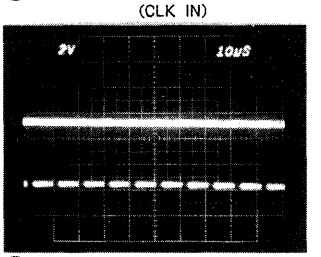
47 IC520 ④ pin (PCOT)
(PLAY mode)



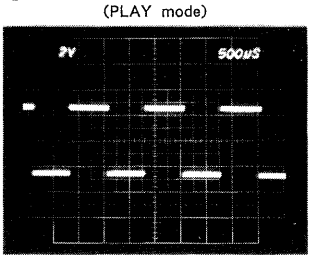
53 IC518 ⑧ pin



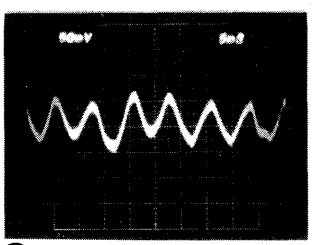
59 IC508 ④ pin
(PLAY mode)



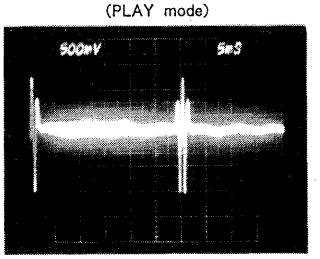
65 IC102, 202 ⑮ pin (SDATA)
(REC mode)



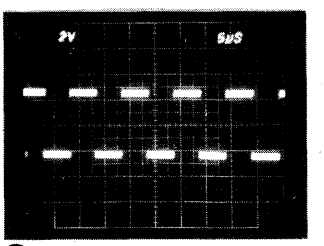
48 IC520 ⑨ pin (CFGO)
(PLAY mode)



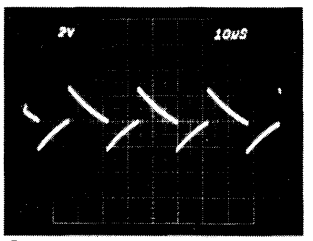
54 IC522 ① pin (TP511/D.ER)
(PLAY mode)



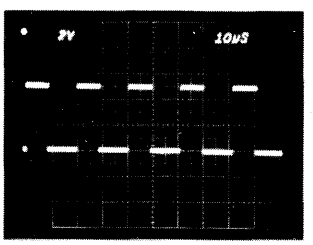
60 IC516 ① pin
(PLAY mode)



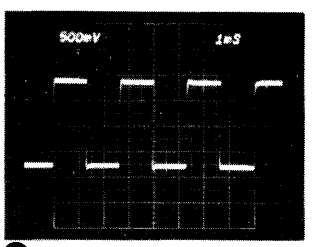
66 IC202 ⑫ pin (HOLD)



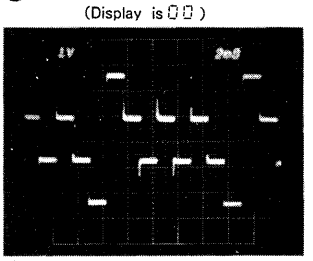

67 IC1 (52) pin (CL1)



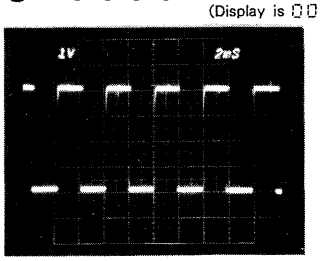

68 IC1 (1) pin (CL2)



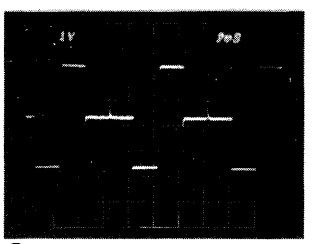

69 IC1 SEG WAVE
(Display is 00)



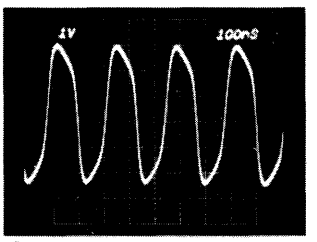

70 IC1 (15), (16), (17), (18) pin (COM0-COM3)
(Display is 00)



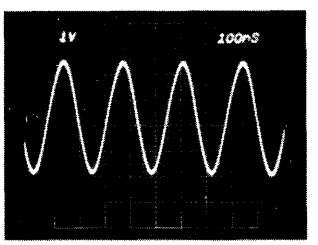

71 IC4 SEG WAVE



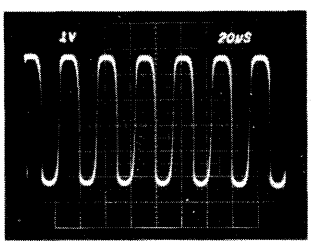

72 IC4 COMMON



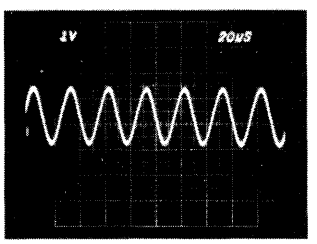

73 IC4 (59) pin × 2



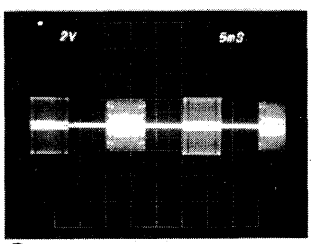

74 IC4 (58) pin × 1



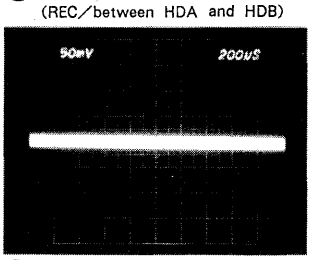

75 IC4 (56) pin (XT2)




76 IC4 (55) pin (XT1)




77 -1 HEAD
(REC/between HDA and HDB)




77 -2 HEAD
(PLAY/between HDA and HDB)

# SECTION 6
# EXPLODED VIEWS

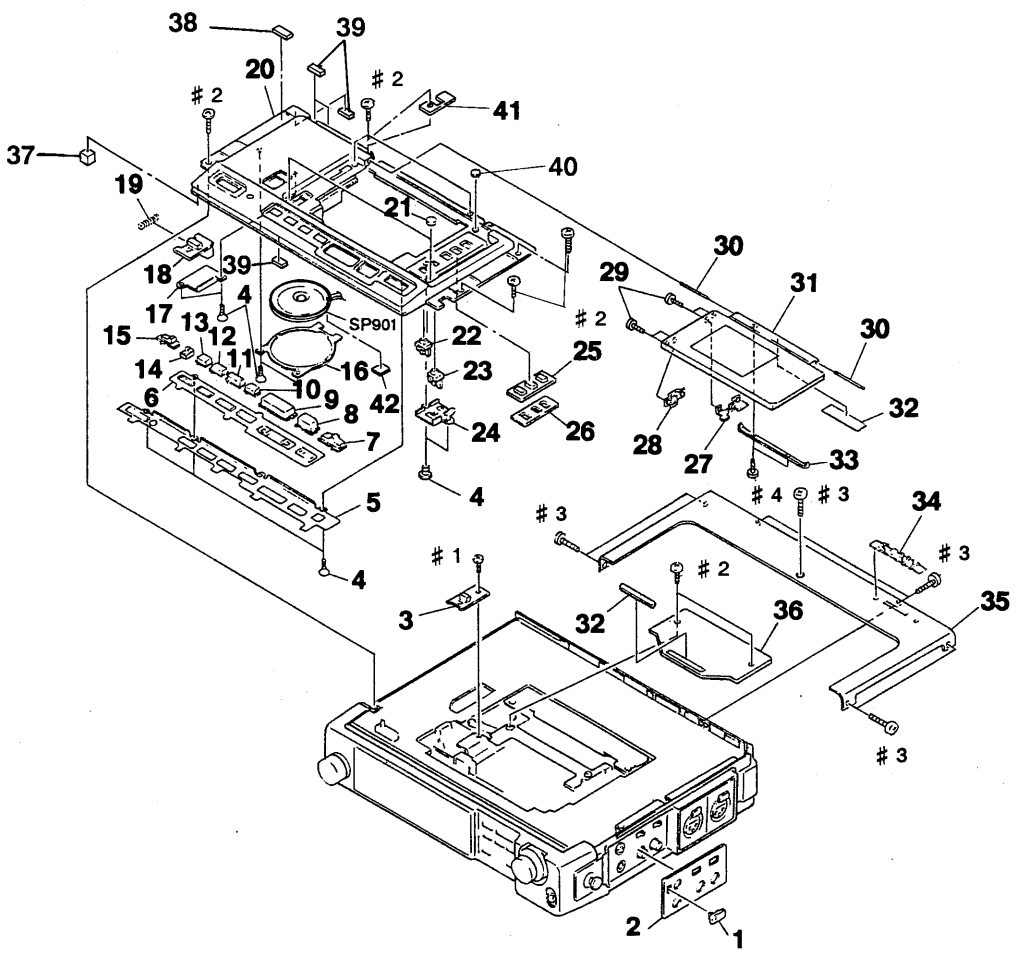
**NOTE:**

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KONB, BALANCE (WHITE) . . . (RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifé.

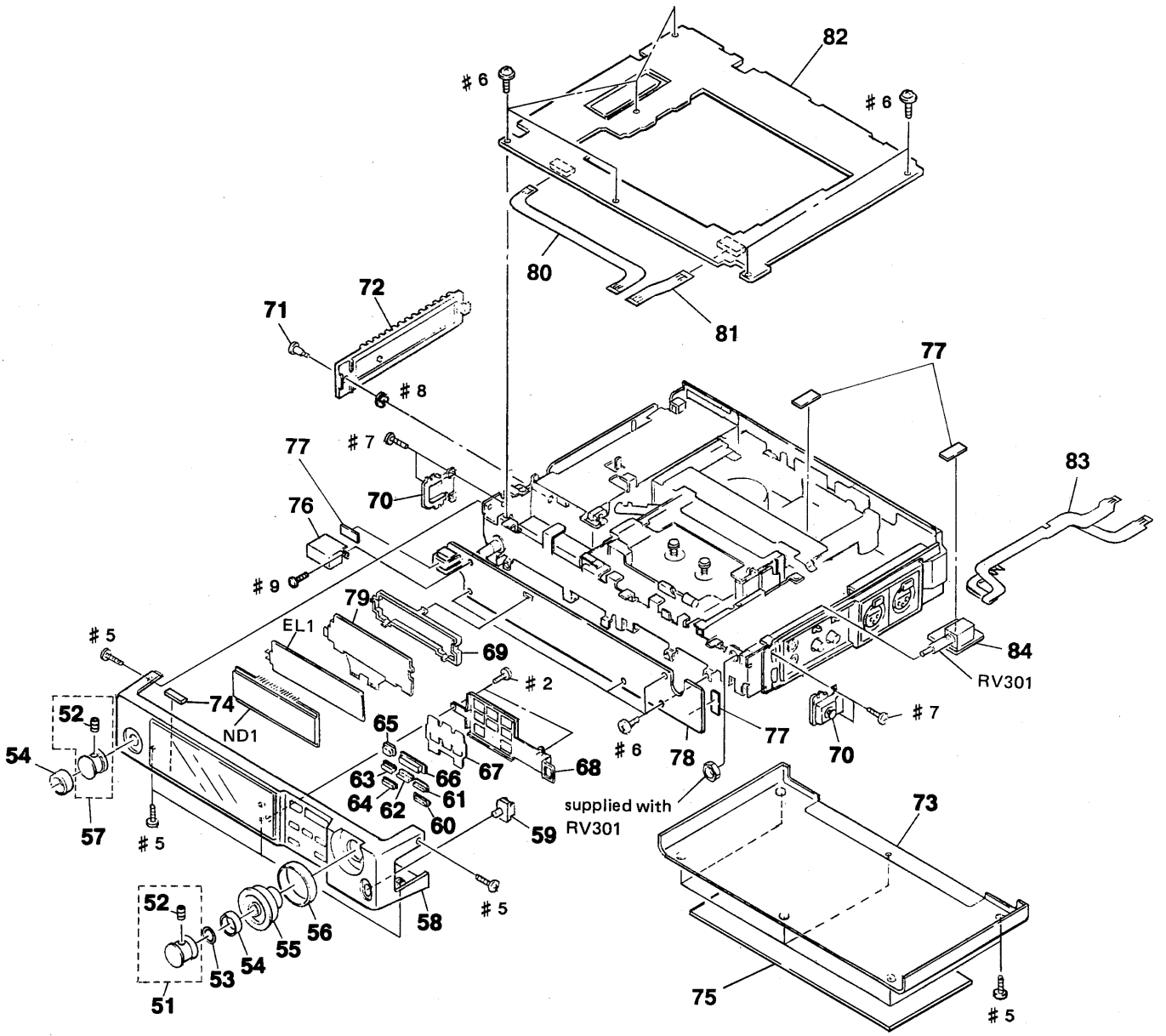
## 6-1. CABINET SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 1 | 3-345-095-01 | LID (D I/O) | |
| 2 | 3-345-076-01 | PLATE (JACK), INDICATION | |
| 3 | 3-344-977-01 | KNOB (EJECT) | |
| 4 | 3-318-382-31 | SCREW (1.7X3), TAPPING | |
| 5 | *3-345-014-01 | BRACKET(CONTROL BUTTON SPRING) | |
| 6 | 3-344-947-01 | SPRING | |
| 7 | 3-344-940-01 | KNOB (HOLD) | |
| 8 | 3-344-941-01 | BUTTON (PAUSE) | |
| 9 | 3-344-942-01 | BUTTON (REC) | |
| 10 | 3-344-943-01 | BUTTON (FF) | |
| 11 | 3-344-944-01 | BUTTON (PLAY) | |
| 12 | 3-344-945-01 | BUTTON (STOP) | |
| 13 | 3-344-946-01 | BUTTON (REW) | |
| 14 | 3-344-955-01 | PLATE(POWER LED), LIGHT GUIDE | |
| 15 | 3-344-939-01 | KNOB (POWER) | |
| 16 | *3-344-951-01 | BRACKET (SP) | |
| 17 | *3-344-949-01 | BRACKET(CASSETE LID OPEN KNOB) | |
| 18 | 3-344-948-01 | KNOB (CASSETTE LID OPEN) | |
| 19 | 3-344-950-01 | SPRING, COMPRESSION | |
| 20 | X-3344-931-1 | CABINET (UPPER) ASSY | |
| 21 | 3-331-603-01 | FOOT | |
| 22 | 3-345-084-01 | KNOB (MIC LOW CUT) | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 23 | 3-345-084-01 | KNOB (MIC ATT) | |
| 24 | *3-345-085-01 | BRACKET (MIC ATT) | |
| 25 | 3-345-086-01 | BUTTON (TIME SET) | |
| 26 | *3-345-087-01 | BRACKET (TC BUTTON) | |
| 27 | *X-3344-906-1 | PLATE ASSY, FULCRUM, OPEN ARM | |
| 28 | *3-344-959-01 | PLATE, LOCK, CASSETTE LID | |
| 29 | 3-704-246-32 | SCREW (P1.4X2.5) | |
| 30 | 3-344-957-01 | SHAFT (CASSETTE LID) | |
| 31 | X-3363-422-1 | LID ASSY, CASSETTE | |
| 32 | 3-344-992-01 | SHEET, REAR, CASSETTE LID | |
| 33 | 3-344-958-01 | PLATE, FIXED, CASSETTE SHAFT | |
| 34 | 3-704-176-01 | EMBLEM (NO.6), SONY | |
| 35 | 3-345-011-11 | PANEL, UPPER | |
| 36 | 3-344-982-11 | PLATE, ORNAMENTAL | |
| 37 | 9-911-840-XX | CUSHION (B) | |
| 38 | 3-553-567-00 | CUSHION | |
| 39 | 9-911-838-XX | CUSHION | |
| 40 | 3-342-380-01 | SHEET, SPEED HOLE | |
| 41 | *3-345-061-01 | PAPER (UPPER), CONDUCTIVE | |
| 42 | 3-831-441-11 | CUSHION (B) | |
| SP901 | 1-503-866-11 | SPEAKER | |

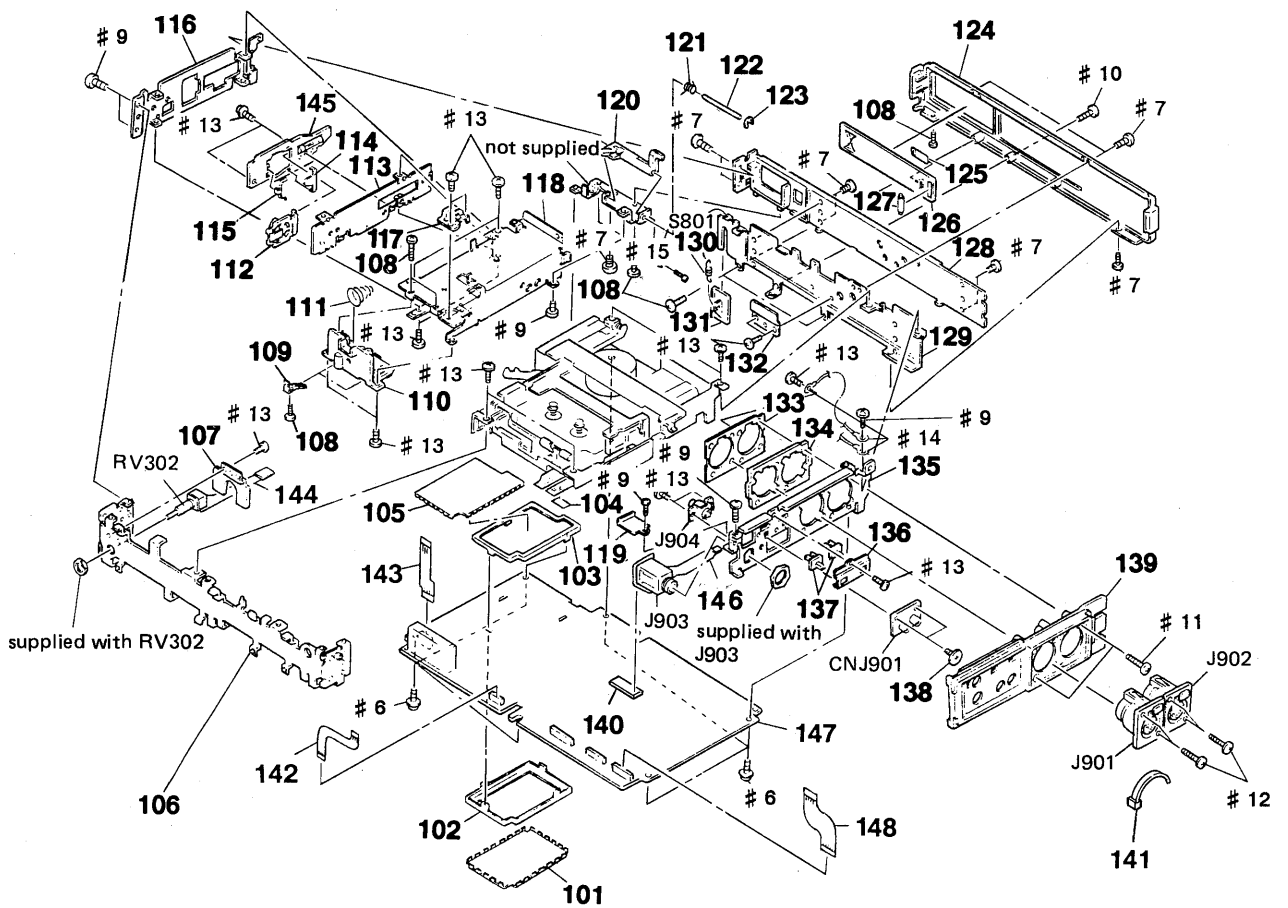
## 6-2. FRONT PANEL SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 51 | X-3344-919-1 | KNOB (REC VOL R) ASSY | |
| 52 | 3-701-507-00 | SET SCREW, DOUBLE POINT, (M3X5) | |
| 53 | 3-344-904-01 | RING, O | |
| 54 | 3-344-937-01 | RING (RIGHT), REC VOL | |
| 55 | X-3344-904-1 | KNOB (REC VOL LEFT) ASSY | |
| 56 | 3-344-936-01 | RING (LEFT), REC VOL | |
| 57 | X-3344-920-1 | KNOB (PB VOL R) ASSY | |
| 58 | X-3363-424-1 | CABINET (FRONT) ASSY | |
| 59 | 3-344-933-01 | KNOB (LIMITER SW) | |
| 60 | 3-344-931-01 | BUTTON (COUNTER RESET) | |
| 61 | 3-344-931-01 | BUTTON (COUNTER MODE) | |
| 62 | 3-344-931-01 | BUTTON (RECORDED TIME) | |
| 63 | 3-344-931-01 | BUTTON (CLOCK) | |
| 64 | 3-344-932-01 | BUTTON (LCD LIGHT) | |
| 65 | 3-344-929-01 | BUTTON (SCAN) | |
| 66 | 3-344-930-01 | BUTTON (SERCH) | |
| 67 | 3-345-013-01 | SPRING | |
| 68 | *3-344-934-01 | BRACKET (BUTTON SPRING) | |
| 69 | 3-345-089-01 | SPACER (EL) | |

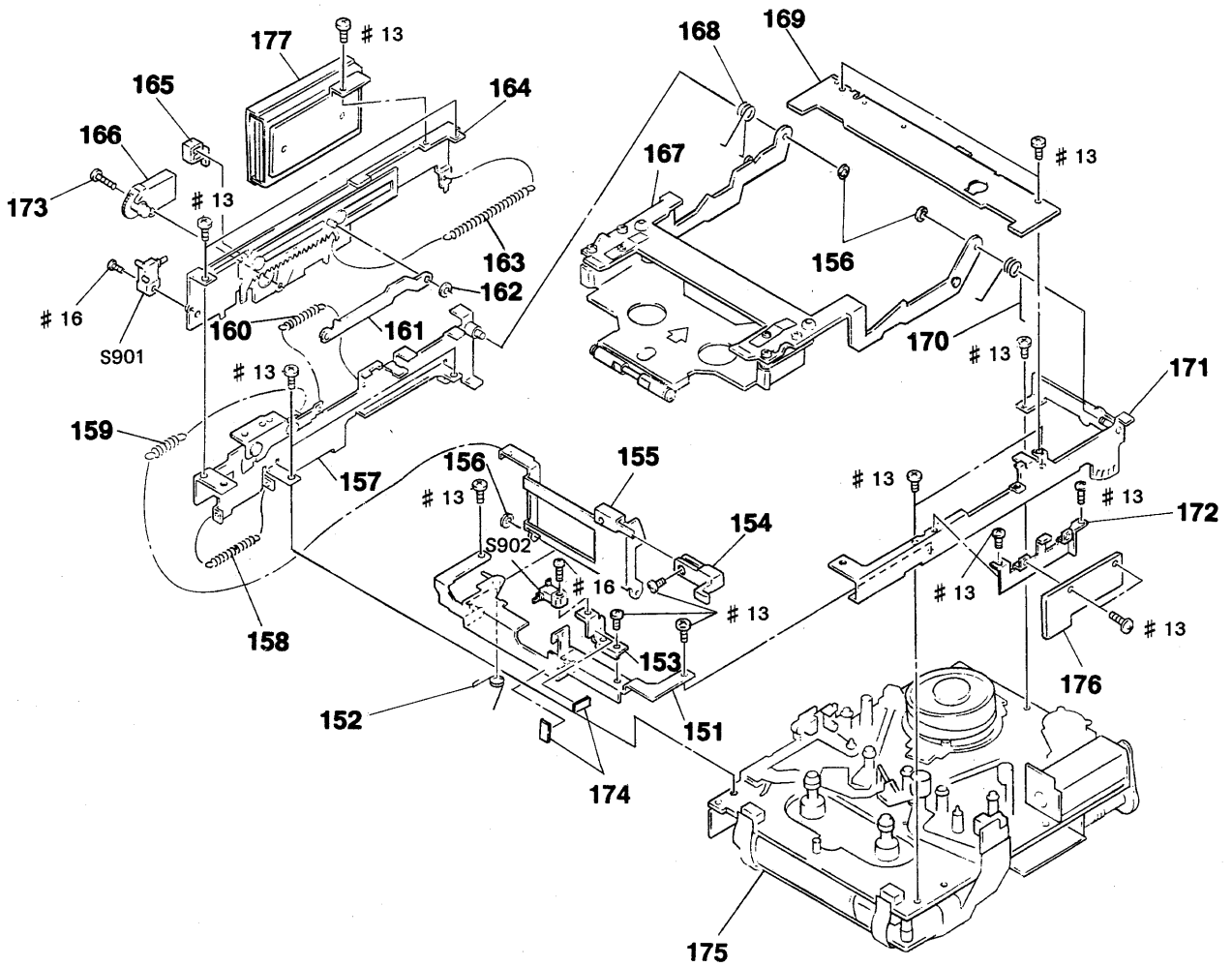
| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 70 | X-3344-902-1 | SHAFT (STRAP) ASSY | |
| 71 | 3-345-094-01 | SCREW (CABINET), STEP | |
| 72 | 3-345-071-01 | CABINET (LEFT SIDE PLATE) | |
| 73 | X-3363-421-1 | PANEL ASSY, LOWER | |
| 74 | *3-354-229-01 | SHEET (FRONT) | |
| 75 | 3-345-005-01 | PAD (B), LOWER | |
| 76 | *3-345-070-01 | PLATE(EL TRANSFORMER A), SHIELD | |
| 77 | 3-831-441-11 | CUSHION (B) | |
| 78 | *A-3016-085-A | SYSTEM CONTROL BOARD, COMPLETE | |
| 79 | *1-630-612-13 | SYSCON SUB FLEXIBLE BOARD | |
| 80 | 1-630-674-11 | FLEXIBLE BOARD | |
| 81 | 1-630-675-11 | FLEXIBLE BOARD | |
| 82 | *A-3016-084-A | ANALOG BOARD, COMPLETE | |
| 83 | *1-630-669-11 | REC VOL FLEXIBLE BOARD | |
| 84 | *1-630-607-11 | REC VOL BOARD | |
| EL1 | 1-519-548-11 | ELEMENT, EL | |
| ND1 | 1-808-725-12 | DISPLAY PANEL, LIQUID CRYSTAL | |
| RV301 | 1-238-615-11 | RES, VAR, CARBON 20KX4 (REC LEVEL) | |

## 6-3. CHASSIS SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 101 | 3-345-096-01 | LID (MAIN A) | |
| 102 | 3-370-623-01 | CASE (DSP A), SHIELD | |
| 103 | 3-370-624-01 | CASE (DSP B), SHIELD | |
| 104 | 3-831-441-11 | CUSHION (B) | |
| 105 | 3-345-097-01 | LID (MAIN B) | |
| 106 | *X-3344-925-1 | CHASSIS (FRONT) ASSY | |
| 107 | *3-354-209-01 | PLATE(EL TRANSFORMER B), SHIELD | |
| 108 | 3-318-203-71 | SCREW (B1.7X5), TAPPING | |
| 109 | 3-344-922-01 | TERMINAL, BATTERY | |
| 110 | *3-354-216-01 | HOLDER (BATTERY TERMINAL) | |
| 111 | 3-686-775-01 | SPRING | |
| 112 | *3-345-075-01 | HOLDER (CLOCK BATT) | |
| 113 | *3-345-072-01 | CASE (B), BATTERY | |
| 114 | 3-345-074-01 | TERMINAL (CLOCK B), BATTERY | |
| 115 | 3-345-073-01 | TERMINAL (CLOCK A), BATTERY | |
| 116 | *3-354-211-01 | CHASSIS (CABINET L) | |
| 117 | X-3344-913-1 | BRACKET ASSY | |
| 118 | *X-3344-923-1 | CASE ASSY, BATTERY | |
| 119 | *3-354-226-01 | PLATE (FLEXIBLE), SHIELD | |
| 120 | 3-354-207-01 | LEVER (BATT LOCK) | |
| 121 | 3-370-620-01 | SPRING, TORSION | |
| 122 | *3-344-920-01 | SHAFT (BATTERY LOCK) | |
| 123 | 3-315-384-11 | WASHER, STOPPER | |
| 124 | 3-345-010-01 | CABINET (REAR) | |
| 125 | 3-344-924-01 | SPRING | |
| 126 | 3-345-009-01 | LID, SLIDE, BATTERY | |
| 127 | 3-344-923-01 | ROLLER, LOCK | |
| 128 | *3-354-215-01 | CABINET (BOTTOM PLATE) | |
| 129 | *3-344-910-01 | CHASSIS (REAR) | |
| 130 | 3-344-912-01 | SPRING, TENSION | |
| 131 | 3-344-911-01 | KNOB (BATTERY) | |
| 132 | *3-354-202-01 | HOLDER (MD CHASSIS) | |
| 133 | *3-345-079-01 | PLATE, NUT | |
| 134 | *3-345-080-01 | SPACER | |
| 135 | *3-354-212-01 | CHASSIS (JACK PLATE) | |
| 136 | *3-345-078-01 | BRACKET (AD KNOB) | |
| 137 | 3-345-077-01 | KNOB (AD) | |
| 138 | 3-345-081-01 | SCREW, STEP | |
| 139 | 3-354-213-01 | CABINET (RIGHT SIDE PLATE) | |
| 140 | 3-831-441-XX | CUSHION (B), CABINET | |
| 141 | *3-337-402-01 | BAND, BINDING | |
| 142 | 1-630-678-11 | FLEXIBLE BOARD | |
| 143 | 1-630-672-11 | MA FLEXIBLE BOARD | |
| 144 | 1-630-671-11 | PB VOL FLEXIBLE BOARD | |
| 145 | *1-630-608-11 | BATT BOARD | |
| 146 | 1-630-670-11 | HEADPHONE FLEXIBLE BOARD | |
| 147 | *A-3016-083-A | MAIN BOARD, COMPLETE | |
| 148 | 1-630-673-11 | FLEXIBLE BOARD | |
| J901 | 1-509-184-51 | CONNECTOR (RECEPTACLE) 3P (MIC/LINE IN) | |
| J902 | 1-509-184-51 | CONNECTOR (RECEPTACLE) 3P (MIC/LINE IN) | |
| J903 | 1-565-108-11 | JACK, LARGE TYPE (HEAD PHONES) | |
| CNJ901 | 1-507-655-00 | PIN JACK (LINE OUT) | |

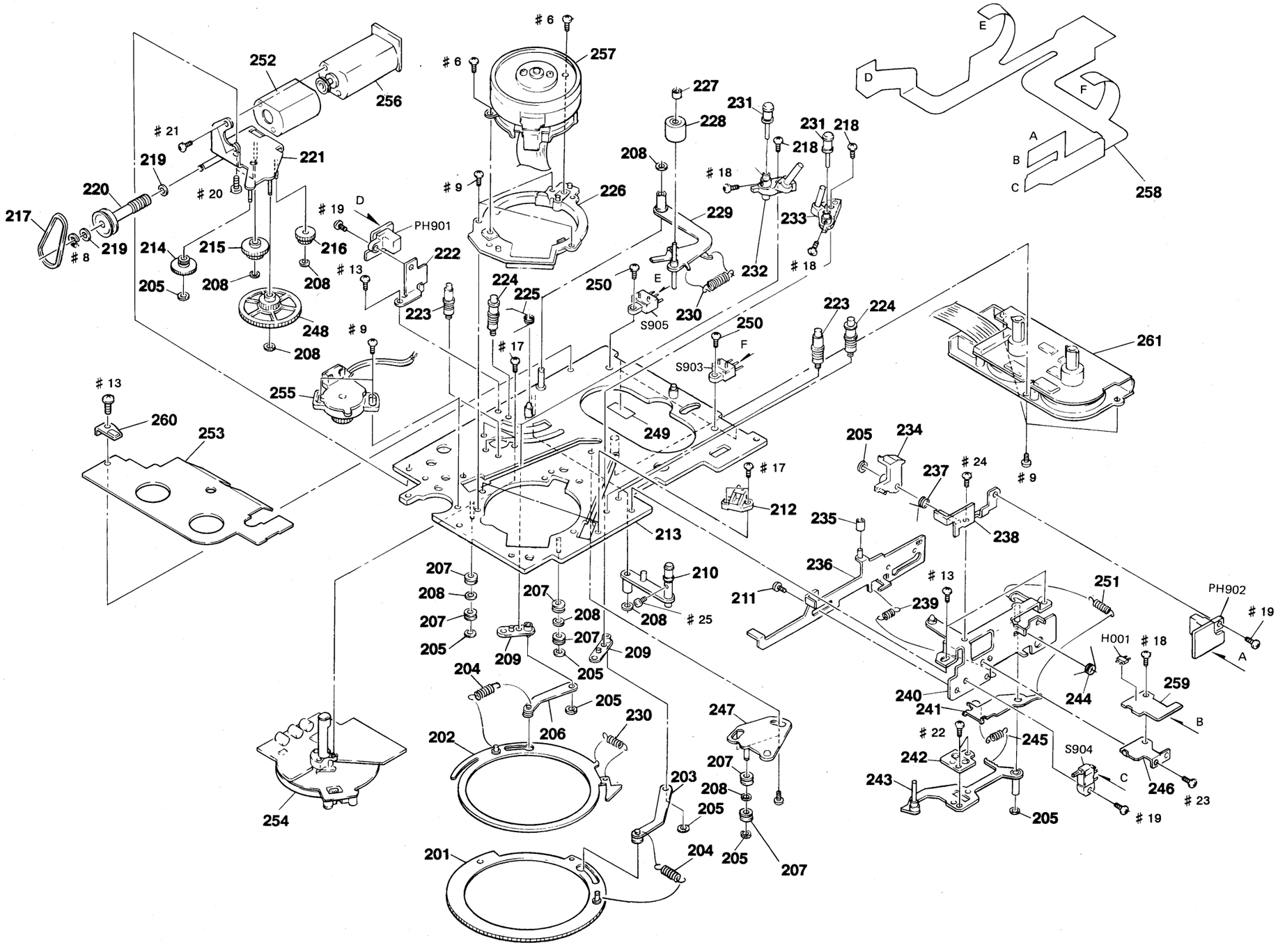
## 6-4. MECHANISM SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 151 | *X-3344-910-1 | CHASSIS ASSY | |
| 152 | 3-344-987-01 | SPRING | |
| 153 | *3-354-205-01 | BRACKET (LOADING SW) | |
| 154 | *3-354-203-01 | LEVER (LOADING A) | |
| 155 | *3-344-988-01 | PLATE, LOCK | |
| 156 | 3-344-901-01 | WASHER, STOPPER | |
| 157 | *X-3344-932-1 | CHASSIS (MD-L) ASSY | |
| 158 | 3-536-820-00 | SPRING, TENSION | |
| 159 | 3-344-989-01 | SPRING, TENSION | |
| 160 | 3-563-104-00 | SPRING, TENSION | |
| 161 | 3-344-963-01 | ARM, CASSETTE LID OPEN | |
| 162 | 3-307-948-31 | WASHER, NYLON | |
| 163 | 3-344-967-01 | SPRING, TENSION | |
| 164 | *X-3344-907-1 | CHASSIS (OPEN SLIDER) ASSY | |
| 165 | *3-354-204-01 | LEVER (LOADING B) | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 166 | 3-681-528-11 | DAMPER | |
| 167 | X-3344-917-1 | FRAME ASSY | |
| 168 | 3-344-974-01 | SPRING (L) | |
| 169 | *3-344-976-01 | CHASSIS (UPPER) | |
| 170 | 3-344-978-01 | SPRING (R) | |
| 171 | *X-3344-915-1 | CHASSIS (MD-R) ASSY | |
| 172 | *3-345-098-01 | HOLDER (D I/O PC BOARD) | |
| 173 | 3-354-208-01 | SCREW (DAMPER), STEP | |
| 174 | 3-831-441-11 | CUSHION (B) | |
| 175 | A-2100-489-A | MECHANISM BLOCK DATM-02DG | |
| 176 | *1-630-610-14 | DIGITAL I/O BOARD | |
| 177 | 1-466-142-11 | MODULATOR, RF | |
| S901 | 1-570-771-11 | SWITCH (HOLDER LOCK) | |
| S902 | 1-570-771-11 | SWITCH (CASSETTE CONTROL) | |

## 6-5. MECHANISM SECTION (DATM-02DG)



| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 201 | X-3337-602-1 | RING (LEFT) ASSY, LOADING | |
| 202 | X-3337-601-1 | RING (RIGHT) ASSY, LOADING | |
| 203 | *X-3337-607-1 | ARM (LEFT) ASSY, LOADING | |
| 204 | 3-337-653-01 | SPRING, TENSION | |
| 205 | 3-559-408-11 | WASHER, POLYETHYLENE, DIA. 1.2 | |
| 206 | *X-3337-603-1 | ARM (RIGHT) ASSY, LOADING | |
| 207 | 3-337-622-01 | ROLLER, RING | |
| 208 | 3-701-436-11 | WASHER, STOPPER | |
| 209 | X-3337-604-1 | PLATE ASSY, LOADING | |
| 210 | X-3337-613-1 | ARM ASSY, F | |
| 211 | 3-703-502-11 | SCREW | |
| 212 | *3-337-685-01 | CATCHER | |
| 213 | *X-3337-625-1 | CHASSIS ASSY, MECHANICAL | |
| 214 | 3-337-669-01 | GEAR, MIDWAY | |
| 215 | 3-337-649-01 | WHEEL, WORM | |
| 216 | 3-337-648-01 | GEAR (B), LOADING | |
| 217 | 3-337-652-01 | BELT, CONTROL | |
| 218 | 3-703-502-81 | SCREW | |
| 219 | 3-701-437-21 | WASHER | |
| 220 | 3-337-650-01 | GEAR, WORM | |
| 221 | *X-3337-617-1 | BRACKET ASSY, CONTROL MOTOR | |
| 222 | *3-337-610-01 | BRACKET (RIGHT), E DETECTION | |
| 223 | X-3362-715-1 | GUIDE (L5) ASSY, FIXED | |
| 224 | X-3362-714-1 | GUIDE (L4) ASSY, FIXED | |
| 225 | 3-345-046-01 | SPRING | |
| 226 | *X-3337-614-1 | SLANT ASSY | |
| 227 | 3-337-626-01 | CAP, PINCH ROLLER | |
| 228 | X-3337-610-1 | PINCH ROLLER ASSY | |
| 229 | X-3337-660-1 | ARM (PINCH ROLLER) ASSY | |
| 230 | 3-547-659-00 | SPRING, TENSION | |
| 231 | X-3337-622-1 | GUIDE (POM) ASSY, ROLLER | |
| 232 | X-3337-647-1 | SLANT BLOCK (RIGHT) ASSY | |
| 233 | X-3337-615-1 | SLANT BLOCK (LEFT) ASSY | |
| 234 | 3-337-698-01 | OPENER, LID | |
| 235 | 3-337-664-01 | ROLLER | |
| 236 | X-3337-627-1 | SLIDER ASSY, MODE | |
| 237 | 3-337-607-01 | SPRING | |
| 238 | X-3337-612-1 | BRACKET (L) ASSY, E DETECTION | |
| 239 | 3-570-892-00 | SPRING, TENSION | |
| 240 | *X-3337-619-1 | CHASSIS ASSY, TENSION REGULATOR | |
| 241 | *3-337-657-01 | LEVER, LIMITER | |
| 242 | X-3337-611-1 | HOLDER ASSY, MAGNET | |
| 243 | X-3337-609-1 | ARM ASSY, TENSION REGULATOR | |
| 244 | 3-337-673-01 | SPRING | |
| 245 | 3-307-377-00 | SPRING, TENSION | |
| 246 | *3-337-662-01 | BRACKET, HOLE ELEMENT | |
| 247 | *X-3337-605-1 | ARM ASSY, RING ROLLER | |
| 248 | 3-337-647-01 | GEAR (A), LOADING | |
| 249 | *3-337-696-01 | SHEET, INSULATING | |
| 250 | 3-364-112-11 | SCREW (B) (M2X4) | |
| 251 | 3-561-626-00 | SPRING, TENSION | |
| 252 | *3-345-101-01 | PLATE (LOADING MOTOR), SHIELD | |
| 253 | *3-344-994-01 | PLATE, BLIND, MD | |
| 254 | 8-835-206-01 | MOTOR, DC BHF-2803A | |
| 255 | 1-464-724-11 | ENCODER, ROTARY | |
| 256 | X-3337-626-1 | L MOTOR ASSY | |
| 257 | 8-848-509-11 | DRUM ASSY DOH-01E | |
| 258 | 1-625-241-11 | MD (A) FLEXIBLE BOARD | |
| 259 | *A-2096-054-A | TENSION REGULATOR BOARD, COMPLETE | |
| 260 | 1-808-281-31 | SENSOR | |
| 261 | 8-835-367-01 | MOTOR, DC U-21 | |
| H001 | 8-719-800-11 | DIODE THS105 | |
| PH901 | 1-807-698-11 | PHOTO SENSER | |
| PH902 | 1-807-698-11 | PHOTO SENSER | |
| S903 | 1-570-883-21 | SWITCH, PUSH (2 KEY) | (REC DET/SOFT DET) |
| S904 | 1-570-771-11 | SWITCH (LIMIT DET) | |
| S905 | 1-570-883-11 | SWITCH, PUSH (2 KEY) | (1.5 SPEED DET/CASSETTE DET) |

ANALOG

# SECTION 7
# ELECTRICAL PARTS LIST

**NOTE:**

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- Items marked "＊" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | ＊ A-3016-084-A | ANALOG BOARD, COMPLETE | | | |
| | | ********** | | | |
| | 3-831-441-11 | CUSHION (B) | | | |
| | | 〈 CAPACITOR 〉 | | | |
| C101 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C102 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C103 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C104 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C105 | 1-126-320-11 | ELECT, NONPOLAR | 10uF | 20% 16V | |
| C106 | 1-124-997-11 | ELECT | 470uF | 20% 10V | |
| C107 | 1-126-320-11 | ELECT, NONPOLAR | 10uF | 20% 16V | |
| C108 | 1-130-489-00 | MYLAR | 0. 033uF | 5% 50V | |
| C109 | 1-130-489-00 | MYLAR | 0. 033uF | 5% 50V | |
| C110 | 1-126-320-11 | ELECT, NONPOLAR | 10uF | 20% 16V | |
| C111 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% 50V | |
| C112 | 1-124-287-00 | ELECT | 10uF | 20% 10V | |
| C113 | 1-163-245-11 | CERAMIC CHIP | 56PF | 5% 50V | |
| C114 | 1-126-283-11 | ELECT | 22uF | 20% 6. 3V | |
| C115 | 1-126-283-11 | ELECT | 22uF | 20% 6. 3V | |
| C116 | 1-124-287-00 | ELECT | 10uF | 20% 10V | |
| C117 | 1-126-163-11 | ELECT | 4. 7uF | 20% 50V | |
| C118 | 1-126-157-11 | ELECT | 10uF | 20% 16V | |
| C119 | 1-163-109-00 | CERAMIC CHIP | 47PF | 5% 50V | |
| C120 | 1-126-151-11 | ELECT, NONPOLAR | 4. 7uF | 20% 16V | |
| C121 | 1-124-995-11 | ELECT | 220uF | 20% 10V | |
| C122 | 1-124-995-11 | ELECT | 220uF | 20% 10V | |
| C123 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C124 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C125 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C126 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C127 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C128 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C129 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C130 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C131 | 1-126-163-11 | ELECT | 4. 7uF | 20% 50V | |
| C132 | 1-124-995-11 | ELECT | 220uF | 20% 10V | |
| C133 | 1-126-163-11 | ELECT | 4. 7uF | 20% 50V | |
| C134 | 1-124-287-00 | ELECT | 10uF | 20% 10V | |
| C201 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C202 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C203 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C204 | 1-126-049-11 | ELECT | 22uF | 20% 50V | |
| C205 | 1-126-320-11 | ELECT, NONPOLAR | 10uF | 20% 16V | |
| C206 | 1-124-997-11 | ELECT | 470uF | 20% 10V | |
| C207 | 1-126-320-11 | ELECT, NONPOLAR | 10uF | 20% 16V | |
| C208 | 1-130-489-00 | MYLAR | 0. 033uF | 5% 50V | |
| C209 | 1-130-489-00 | MYLAR | 0. 033uF | 5% 50V | |
| C210 | 1-126-320-11 | ELECT, NONPOLAR | 10uF | 20% 16V | |
| C211 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% 50V | |
| C212 | 1-124-287-00 | ELECT | 10uF | 20% 10V | |
| C213 | 1-163-245-11 | CERAMIC CHIP | 56PF | 5% 50V | |
| C214 | 1-126-283-11 | ELECT | 22uF | 20% 6. 3V | |
| C215 | 1-126-283-11 | ELECT | 22uF | 20% 6. 3V | |
| C216 | 1-124-287-00 | ELECT | 10uF | 20% 10V | |
| C217 | 1-126-163-11 | ELECT | 4. 7uF | 20% 50V | |
| C218 | 1-126-157-11 | ELECT | 10uF | 20% 16V | |
| C219 | 1-163-109-00 | CERAMIC CHIP | 47PF | 5% 50V | |
| C220 | 1-126-151-11 | ELECT, NONPOLAR | 4. 7uF | 20% 16V | |
| C221 | 1-124-995-11 | ELECT | 220uF | 20% 10V | |
| C222 | 1-124-995-11 | ELECT | 220uF | 20% 10V | |
| C223 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C224 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C225 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C226 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C227 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C228 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C229 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C230 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C231 | 1-126-163-11 | ELECT | 4. 7uF | 20% 50V | |
| C232 | 1-124-995-11 | ELECT | 220uF | 20% 10V | |
| C233 | 1-126-163-11 | ELECT | 4. 7uF | 20% 50V | |
| C234 | 1-124-287-00 | ELECT | 10uF | 20% 10V | |
| C301 | 1-126-023-11 | ELECT | 100uF | 20% 25V | |
| C302 | 1-126-023-11 | ELECT | 100uF | 20% 25V | |
| C303 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C304 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C305 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C306 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C307 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C308 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C309 | 1-126-283-11 | ELECT | 22uF | 20% 6. 3V | |
| C310 | 1-126-283-11 | ELECT | 22uF | 20% 6. 3V | |
| C311 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C312 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C313 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C314 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C315 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C316 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C317 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C318 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C319 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C320 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C321 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C322 | 1-126-282-11 | ELECT | 10uF | 20% 16V | |
| C323 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C324 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C325 | 1-163-081-00 | CERAMIC CHIP | 0. 22uF | 25V | |
| C326 | 1-164-232-11 | CERAMIC CHIP | 0. 01uF | 50V | |
| C327 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C328 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C329 | 1-126-157-11 | ELECT | 10uF | 20% 16V | |
| C330 | 1-163-037-11 | CERAMIC CHIP | 0. 022uF | 10% 25V | |
| C331 | 1-164-232-11 | CERAMIC CHIP | 0. 01uF | 50V | |
| C332 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C333 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C334 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C335 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C336 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C337 | 1-135-149-21 | TANTALUM CHIP | 2. 2uF | 20% 10V | |
| C338 | 1-126-163-11 | ELECT | 4. 7uF | 20% 50V | |
| C339 | 1-124-994-11 | ELECT | 100uF | 20% 10V | |
| C340 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C341 | 1-126-022-11 | ELECT | 47uF | 20% 25V | |
| C342 | 1-126-369-11 | ELECT | 220uF | 20% 6. 3V | |
| C343 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C344 | 1-126-022-11 | ELECT | 47uF | 20% 25V | |
| C345 | 1-126-369-11 | ELECT | 220uF | 20% 6. 3V | |
| C346 | 1-163-009-11 | CERAMIC CHIP | 0. 001uF | 10% 50V | |
| C347 | 1-163-009-11 | CERAMIC CHIP | 0. 001uF | 10% 50V | |
| C348 | 1-163-009-11 | CERAMIC CHIP | 0. 001uF | 10% 50V | |
| C349 | 1-163-009-11 | CERAMIC CHIP | 0. 001uF | 10% 50V | |
| C350 | 1-163-009-11 | CERAMIC CHIP | 0. 001uF | 10% 50V | |
| C351 | 1-102-074-00 | CERAMIC | 0. 001uF | 10% 50V | |
| C352 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| C353 | 1-163-077-00 | CERAMIC CHIP | 0. 1uF | 10% 25V | |
| | | 〈 CONNECTOR 〉 | | | |
| CN101 | 1-506-469-11 | CONNECTOR 4P, MALE | | | |
| CN201 | 1-506-469-11 | CONNECTOR 4P, MALE | | | |
| CN301 | 1-506-469-11 | CONNECTOR 4P, MALE | | | |
| CN302 | 1-506-481-11 | CONNECTOR 2P, MALE | | | |
| CN303 | 1-506-470-11 | CONNECTOR 5P, MALE | | | |
| CN304 | 1-506-467-11 | CONNECTOR 2P, MALE | | | |
| | | 〈 CONPOSITION CIRCUIT BLOCK 〉 | | | |
| CP301 | 1-466-128-11 | AMPLIFIER UNIT, MICROPHONE | | | |
| CP302 | 1-466-127-11 | CIRCUIT UNIT, AUDIO | | | |
| | | 〈 DIODE 〉 | | | |
| D101 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D102 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D103 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D104 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D105 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D106 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D107 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D108 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D109 | 8-719-800-76 | DIODE 1SS226 | | | |
| D110 | 8-719-800-76 | DIODE 1SS226 | | | |
| D201 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D202 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D203 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D204 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D205 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D206 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D207 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D208 | 8-719-106-71 | DIODE RD12M-B2 | | | |
| D209 | 8-719-800-76 | DIODE 1SS226 | | | |
| D210 | 8-719-800-76 | DIODE 1SS226 | | | |
| D303 | 8-719-400-18 | DIODE MA152WK | | | |

# ANALOG

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| D304 | 8-719-800-76 | DIODE 1SS226 | |
| D305 | 8-719-104-34 | DIODE 1S2836 | |
| D306 | 8-719-400-18 | DIODE MA152WK | |
| D307 | 8-719-946-86 | DIODE SLM-125MC | |
| D308 | 8-719-946-86 | DIODE SLM-125MC | |
| | | 〈 IC 〉 | |
| IC101 | 8-759-637-09 | IC M5238FP-722 | |
| IC102 | 8-759-985-00 | IC AK9201-VQ | |
| IC201 | 8-759-637-09 | IC M5238FP-722 | |
| IC202 | 8-759-985-00 | IC AK9201-VQ | |
| IC301 | 8-759-970-68 | IC LF353M | |
| IC302 | 8-759-970-68 | IC LF353M | |
| IC303 | 8-759-970-68 | IC LF353M | |
| IC304 | 8-759-100-94 | IC uPC358G2 | |
| IC305 | 8-759-031-60 | IC SC7SU04FER | |
| IC306 | 8-759-701-54 | IC NJM2073D | |
| IC307 | 8-759-701-43 | IC NJM3414D | |
| IC308 | 8-759-938-46 | IC PCM56P-JS | |
| IC309 | 8-759-970-68 | IC LF353M | |
| | | 〈 RESISTOR 〉 | |
| JR301 | 1-216-296-00 | METAL CHIP 0 5% 1/8W | |
| JR302 | 1-216-296-00 | METAL CHIP 0 5% 1/8W | |
| | | 〈 COIL 〉 | |
| L301 | 1-410-509-11 | INDUCTOR 10uH | |
| L302 | 1-410-509-11 | INDUCTOR 10uH | |
| | | 〈 FILTER 〉 | |
| LF301 | 1-236-506-11 | FILTER, LOW PASS | |
| | | 〈 TRANSISTOR 〉 | |
| Q101 | 8-729-402-19 | TRANSISTOR XN6501 | |
| Q102 | 8-729-402-19 | TRANSISTOR XN6501 | |
| Q103 | 8-729-141-48 | TRANSISTOR 2SB624-BV345 | |
| Q104 | 8-729-141-75 | TRANSISTOR 2SD596-DV345 | |
| Q105 | 8-729-141-75 | TRANSISTOR 2SD596-DV345 | |
| Q201 | 8-729-402-19 | TRANSISTOR XN6501 | |
| Q202 | 8-729-402-19 | TRANSISTOR XN6501 | |
| Q203 | 8-729-141-48 | TRANSISTOR 2SB624-BV345 | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| Q204 | 8-729-141-75 | TRANSISTOR 2SD596-DV345 | |
| Q205 | 8-729-141-75 | TRANSISTOR 2SD596-DV345 | |
| Q301 | 8-729-141-75 | TRANSISTOR 2SD596-DV345 | |
| Q302 | 8-729-141-48 | TRANSISTOR 2SB624-BV345 | |
| Q303 | 8-729-402-19 | TRANSISTOR XN6501 | |
| Q304 | 8-729-901-05 | TRANSISTOR DTA124EK | |
| Q305 | 8-729-901-05 | TRANSISTOR DTA124EK | |
| Q306 | 8-729-901-00 | TRANSISTOR DTC124EK | |
| Q307 | 8-729-230-49 | TRANSISTOR 2SC2712-YG | |
| Q308 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q309 | 8-729-230-49 | TRANSISTOR 2SC2712-YG | |
| Q310 | 8-729-140-72 | TRANSISTOR 2SB798-DLDK | |
| Q311 | 8-729-402-19 | TRANSISTOR XN6501 | |
| Q312 | 8-729-402-78 | TRANSISTOR XN6401 | |
| Q313 | 8-729-140-75 | TRANSISTOR 2SD999-CLCK | |
| | | 〈 RESISTOR 〉 | |
| R101 | 1-216-675-11 | METAL CHIP 10K 0.5% 1/10W | |
| R102 | 1-216-691-11 | METAL CHIP 47K 0.5% 1/10W | |
| R103 | 1-216-663-11 | METAL CHIP 3.3K 0.5% 1/10W | |
| R104 | 1-216-691-11 | METAL CHIP 47K 0.5% 1/10W | |
| R105 | 1-216-663-11 | METAL CHIP 3.3K 0.5% 1/10W | |
| R106 | 1-216-659-11 | METAL CHIP 2.2K 0.5% 1/10W | |
| R107 | 1-216-634-11 | METAL CHIP 200 0.5% 1/10W | |
| R108 | 1-216-683-11 | METAL CHIP 22K 0.5% 1/10W | |
| R109 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| R110 | 1-216-691-11 | METAL CHIP 47K 0.5% 1/10W | |
| R111 | 1-216-699-11 | METAL CHIP 100K 0.5% 1/10W | |
| R112 | 1-216-115-00 | METAL CHIP 560K 5% 1/10W | |
| R113 | 1-216-671-11 | METAL CHIP 6.8K 0.5% 1/10W | |
| R114 | 1-216-649-11 | METAL CHIP 820 0.5% 1/10W | |
| R115 | 1-216-677-11 | METAL CHIP 12K 0.5% 1/10W | |
| R116 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| R117 | 1-216-115-00 | METAL CHIP 560K 5% 1/10W | |
| R118 | 1-216-651-11 | METAL CHIP 1K 0.5% 1/10W | |
| R119 | 1-216-663-11 | METAL CHIP 3.3K 0.5% 1/10W | |
| R120 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| R121 | 1-216-174-00 | METAL GLAZE 100 5% 1/8W | |
| R122 | 1-216-105-00 | METAL CHIP 220K 5% 1/10W | |
| R123 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| R124 | 1-216-080-00 | METAL CHIP 20K 5% 1/10W | |
| R125 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | |

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R126 | 1-216-080-00 | METAL CHIP | 20K | 5% | 1/10W | |
| R127 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R128 | 1-216-080-00 | METAL CHIP | 20K | 5% | 1/10W | |
| R129 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R130 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R131 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R132 | 1-216-651-11 | METAL CHIP | 1K | 0.5% | 1/10W | |
| R133 | 1-216-652-11 | METAL CHIP | 1.1K | 0.5% | 1/10W | |
| R134 | 1-216-661-11 | METAL CHIP | 2.7K | 0.5% | 1/10W | |
| R135 | 1-216-661-11 | METAL CHIP | 2.7K | 0.5% | 1/10W | |
| R136 | 1-216-043-00 | METAL CHIP | 560 | 5% | 1/10W | |
| R137 | 1-216-037-00 | METAL CHIP | 330 | 5% | 1/10W | |
| R138 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R139 | 1-216-666-11 | METAL CHIP | 4.3K | 0.5% | 1/10W | |
| R140 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R141 | 1-216-679-11 | METAL CHIP | 15K | 0.5% | 1/10W | |
| R142 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R143 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R144 | 1-216-160-00 | METAL GLAZE | 27 | 5% | 1/8W | |
| R145 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R146 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R147 | 1-216-076-00 | METAL GLAZE | 13K | 5% | 1/10W | |
| R148 | 1-216-121-00 | METAL CHIP | 1M | 5% | 1/10W | |
| R149 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R150 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R151 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W | |
| R152 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R153 | 1-216-679-11 | METAL CHIP | 15K | 0.5% | 1/10W | |
| R154 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W | |
| R155 | 1-216-667-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | |
| R156 | 1-216-667-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | |
| R201 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W | |
| R202 | 1-216-691-11 | METAL CHIP | 47K | 0.5% | 1/10W | |
| R203 | 1-216-663-11 | METAL CHIP | 3.3K | 0.5% | 1/10W | |
| R204 | 1-216-691-11 | METAL CHIP | 47K | 0.5% | 1/10W | |
| R205 | 1-216-663-11 | METAL CHIP | 3.3K | 0.5% | 1/10W | |
| R206 | 1-216-659-11 | METAL CHIP | 2.2K | 0.5% | 1/10W | |
| R207 | 1-216-634-11 | METAL CHIP | 200 | 0.5% | 1/10W | |
| R208 | 1-216-683-11 | METAL CHIP | 22K | 0.5% | 1/10W | |
| R209 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R210 | 1-216-691-11 | METAL CHIP | 47K | 0.5% | 1/10W | |
| R211 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W | |
| R212 | 1-216-115-00 | METAL CHIP | 560K | 5% | 1/10W | |
| R213 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W | |
| R214 | 1-216-649-11 | METAL CHIP | 820 | 0.5% | 1/10W | |
| R215 | 1-216-677-11 | METAL CHIP | 12K | 0.5% | 1/10W | |
| R216 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R217 | 1-216-115-00 | METAL CHIP | 560K | 5% | 1/10W | |
| R218 | 1-216-651-11 | METAL CHIP | 1K | 0.5% | 1/10W | |
| R219 | 1-216-663-11 | METAL CHIP | 3.3K | 0.5% | 1/10W | |
| R220 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R221 | 1-216-174-00 | METAL GLAZE | 100 | 5% | 1/8W | |
| R222 | 1-216-105-00 | METAL CHIP | 220K | 5% | 1/10W | |
| R223 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R224 | 1-216-080-00 | METAL CHIP | 20K | 5% | 1/10W | |
| R225 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R226 | 1-216-080-00 | METAL CHIP | 20K | 5% | 1/10W | |
| R227 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R228 | 1-216-080-00 | METAL CHIP | 20K | 5% | 1/10W | |
| R229 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R230 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R231 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R232 | 1-216-651-11 | METAL CHIP | 1K | 0.5% | 1/10W | |
| R233 | 1-216-652-11 | METAL CHIP | 1.1K | 0.5% | 1/10W | |
| R234 | 1-216-661-11 | METAL CHIP | 2.7K | 0.5% | 1/10W | |
| R235 | 1-216-661-11 | METAL CHIP | 2.7K | 0.5% | 1/10W | |
| R236 | 1-216-043-00 | METAL CHIP | 560 | 5% | 1/10W | |
| R237 | 1-216-037-00 | METAL CHIP | 330 | 5% | 1/10W | |
| R238 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R239 | 1-216-666-11 | METAL CHIP | 4.3K | 0.5% | 1/10W | |
| R240 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R241 | 1-216-679-11 | METAL CHIP | 15K | 0.5% | 1/10W | |
| R242 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R243 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R244 | 1-216-160-00 | METAL GLAZE | 27 | 5% | 1/8W | |
| R245 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R246 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R247 | 1-216-076-00 | METAL GLAZE | 13K | 5% | 1/10W | |
| R248 | 1-216-121-00 | METAL CHIP | 1M | 5% | 1/10W | |
| R249 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R250 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R251 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W | |
| R252 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R253 | 1-216-679-11 | METAL CHIP | 15K | 0.5% | 1/10W | |

# ANALOG BATT

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R254 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W | |
| R255 | 1-216-667-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | |
| R256 | 1-216-667-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | |
| R301 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W | |
| R302 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W | |
| R303 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W | |
| R304 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R305 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R307 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R308 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R309 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R310 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R311 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R312 | 1-218-236-91 | METAL GLAZE | 1 | 10% | 1/4W | |
| R313 | 1-216-009-00 | METAL CHIP | 22 | 5% | 1/10W | |
| R314 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R315 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R316 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W | |
| R317 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R318 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W | |
| R319 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W | |
| R320 | 1-216-115-00 | METAL CHIP | 560K | 5% | 1/10W | |
| R321 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W | |
| R322 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W | |
| R323 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R324 | 1-216-069-00 | METAL CHIP | 6.8K | 5% | 1/10W | |
| R325 | 1-216-105-00 | METAL CHIP | 220K | 5% | 1/10W | |
| R326 | 1-216-106-00 | METAL CHIP | 240K | 5% | 1/10W | |
| R327 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W | |
| R328 | 1-216-056-00 | METAL GLAZE | 2K | 5% | 1/10W | |
| R329 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R330 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R331 | 1-216-056-00 | METAL GLAZE | 2K | 5% | 1/10W | |
| R332 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R333 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R334 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W | |
| R335 | 1-216-222-00 | METAL GLAZE | 10K | 5% | 1/8W | |
| | | ⟨ VARIABLE RESISTOR ⟩ | | | | |
| RV102 | 1-237-038-11 | RES, ADJ, CERMET 50K | | | | |
| RV202 | 1-237-038-11 | RES, ADJ, CERMET 50K | | | | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| | | ⟨ SWITCH ⟩ | |
| S301 | 1-554-122-00 | SWITCH, SLIDE (INPUT SELECT LINE IN/MIC) | |
| S302 | 1-554-123-00 | SWITCH, SLIDE (MIC ATT (dB)) | |
| S303 | 1-554-123-00 | SWITCH, SLIDE (MIC LOW CUT) | |
| S304 | 1-571-364-11 | SWITCH, SLIDE (▬◣ POWER) | |
| S305 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (REW/REVIEW) | |
| S306 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (STOP) | |
| S307 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (PLAY) | |
| S308 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (FF/CUE) | |
| S309 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (REC/INDEX) | |
| S310 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (PAUSE) | |
| S311 | 1-553-977-51 | SWITCH, SLIDE (▬◣ HOLD) | |
| S312 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (SET) | |
| S313 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (+) | |
| S314 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (-) | |
| S315 | 1-554-123-00 | SWITCH, SLIDE (INPUT SELECT DIGITAL/ANALOG) | |
| | | ⟨ CONNECTOR ⟩ | |
| W301 | 1-563-995-11 | CONNECTOR, FPC (ZIF) 5P | |
| W302 | 1-563-995-11 | CONNECTOR, FPC (ZIF) 5P | |
| W303 | 1-568-141-11 | HOUSING, CONNECTOR 5P | |
| W304 | 1-568-141-11 | HOUSING, CONNECTOR 5P | |
| W305 | 1-566-512-11 | CONNECTOR, FPC (ZIF) 12P | |
| W306 | 1-563-998-11 | CONNECTOR, FPC (ZIF) 8P | |
| W307 | 1-565-056-11 | HOUSING, CONNECTOR 12P | |
| ********** | | | |
| * | 1-630-608-11 | BATT BOARD ********** | |
| | 3-345-073-01 | TERMINAL (CLOCK A), BATTERY | |
| | 3-345-074-01 | TERMINAL (CLOCK B), BATTERY | |
| * | 3-345-075-01 | HOLDER (CLOCK BATT) | |
| | 3-831-441-11 | CUSHION (B) | |
| | | ⟨ DIODE ⟩ | |
| D903 | 8-719-106-71 | DIODE RD12M-B2 | |
| D904 | 8-719-800-76 | DIODE 1SS226 | |
| D905 | 8-719-106-71 | DIODE RD12M-B2 | |
| D906 | 8-719-800-76 | DIODE 1SS226 | |

# BATT | DIGITAL I/O | HEADPHONE | MAIN

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | 〈 RESISTOR 〉 | | | |
| R901 | 1-216-124-11 | METAL GLAZE | 1.3M | 5% 1/10W | |
| R902 | 1-216-131-11 | METAL CHIP | 2.7M | 5% 1/10W | |
| | | 〈 TIMER 〉 | | | |
| TM901 | 1-548-119-21 | HOURS METER | | | |
| ********** | | | | | |
| | * 1-630-610-11 | DIGITAL I/O BOARD | | | |
| | | ********** | | | |
| | | 〈 CAPACITOR 〉 | | | |
| C400 | 1-131-388-00 | TANTALUM | 68uF | 10% 6.3V | |
| C401 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% 25V | |
| C402 | 1-124-242-00 | ELECT | 33uF | 20% 25V | |
| C403 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | 50V | |
| C404 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | 25V | |
| C405 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | 25V | |
| C406 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% 50V | |
| C407 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% 50V | |
| C452 | 1-163-109-00 | CERAMIC CHIP | 47PF | 5% 50V | |
| | | 〈 CONNECTOR 〉 | | | |
| CN400 | * 1-565-572-21 | PIN, CONNECTOR (PC BOARD) 6P | | | |
| CN401 | * 1-565-572-11 | PIN, CONNECTOR (PC BOARD) 6P | | | |
| | | 〈 IC 〉 | | | |
| IC400 | 8-759-927-29 | IC SN74HCU04ANS | | | |
| | | 〈 RESISTOR 〉 | | | |
| R400 | 1-216-017-00 | METAL CHIP | 47 | 5% 1/10W | |
| R401 | 1-216-017-00 | METAL CHIP | 47 | 5% 1/10W | |
| R402 | 1-216-182-00 | METAL GLAZE | 220 | 5% 1/8W | |
| R403 | 1-216-182-00 | METAL GLAZE | 220 | 5% 1/8W | |
| R451 | 1-216-037-00 | METAL GLAZE | 330 | 5% 1/10W | |
| R452 | 1-216-295-00 | METAL GLAZE | 0 | 5% 1/10W | |
| | | 〈 TRANSFORMER 〉 | | | |
| T400 | 1-437-199-11 | TRANSFORMER, PULSE | | | |
| T401 | 1-437-200-11 | TRANSFORMER, PULSE | | | |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| ********** | | | | | |
| | 1-630-670-11 | HEADPHONE FLEXIBLE BOARD | | | |
| | | ********** | | | |
| | | 〈 JACK 〉 | | | |
| J903 | 1-565-108-11 | JACK, LARGE TYPE (HEADPHONE) | | | |
| ********** | | | | | |
| | * A-3016-083-A | MAIN BOARD, COMPLETE | | | |
| | | ********** | | | |
| | 1-135-159-21 | TANTALUM CHIP | 10uF | 10% 16V | |
| | * 3-309-723-00 | SHEET, HOLDER (B) | | | |
| | 3-327-119-01 | SHEET, INSULATING | | | |
| | * 3-345-096-01 | LID (MAIN A) | | | |
| | * 3-345-097-01 | LID (MAIN B) | | | |
| | * 3-370-623-01 | CASE (DSP A), SHIELD | | | |
| | * 3-370-624-01 | CASE (DSP B), SHIELD | | | |
| | 3-831-441-11 | CUSHION, CABINET UPPER 10X7X0.5 | | | |
| | 3-578-260-00 | SPACER | | | |
| | 3-831-441-11 | CUSHION (B) | | | |
| | | 〈 CAPACITOR 〉 | | | |
| C501 | 1-126-153-11 | ELECT | 22uF | 20% 6.3V | |
| C502 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% 25V | |
| C503 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | 50V | |
| C504 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% 25V | |
| C505 | 1-124-472-11 | ELECT | 470uF | 20% 10V | |
| C506 | 1-126-157-11 | ELECT | 10uF | 20% 16V | |
| C507 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% 25V | |
| C510 | 1-126-153-11 | ELECT | 22uF | 20% 6.3V | |
| C514 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% 25V | |
| C517 | 1-126-153-11 | ELECT | 22uF | 20% 6.3V | |
| C518 | 1-124-589-11 | ELECT | 47uF | 20% 16V | |
| C519 | 1-126-162-11 | ELECT | 3.3uF | 20% 50V | |
| C520 | 1-126-162-11 | ELECT | 3.3uF | 20% 50V | |
| C521 | 1-124-584-00 | ELECT | 100uF | 20% 10V | |
| C522 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | 50V | |
| C523 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | 50V | |
| C524 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | 50V | |
| C525 | 1-136-169-00 | FILM | 0.22uF | 5% 50V | |
| C526 | 1-130-871-11 | FILM | 0.01uF | 5% 50V | |

# MAIN

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| C527 | 1-135-159-21 | TANTALUM CHIP | 10uF | 10% | 16V | |
| C528 | 1-124-589-11 | ELECT | 47uF | 20% | 16V | |
| C530 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C531 | 1-126-153-11 | ELECT | 22uF | 20% | 6.3V | |
| C532 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C533 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C534 | 1-126-153-11 | ELECT | 22uF | 20% | 6.3V | |
| C535 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | |
| C536 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C537 | 1-135-091-00 | TANTALUM CHIP | 1uF | 20% | 16V | |
| C538 | 1-124-589-11 | ELECT | 47uF | 20% | 16V | |
| C539 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C540 | 1-136-173-00 | FILM | 0.47uF | 5% | 50V | |
| C541 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V | |
| C542 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C543 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C544 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C545 | 1-135-091-00 | TANTALUM CHIP | 1uF | 20% | 16V | |
| C546 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C547 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C548 | 1-135-070-00 | TANTALUM CHIP | 0.1uF | 10% | 35V | |
| C549 | 1-135-091-00 | TANTALUM CHIP | 1uF | 20% | 16V | |
| C550 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C551 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C552 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C553 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C554 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C555 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | |
| C556 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C557 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C558 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | |
| C559 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C560 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C561 | 1-135-159-21 | TANTALUM CHIP | 10uF | 10% | 16V | |
| C562 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C563 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C564 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C565 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C566 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V | |
| C567 | 1-163-019-00 | CERAMIC CHIP | 0.0068uF | 10% | 50V | |
| C568 | 1-135-156-21 | TANTALUM CHIP | 6.8uF | 10% | 6.3V | |
| C569 | 1-136-153-00 | FILM | 0.01uF | 5% | 50V | |
| C570 | 1-136-153-00 | FILM | 0.01uF | 5% | 50V | |
| C571 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C572 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C573 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C574 | 1-124-589-11 | ELECT | 47uF | 20% | 16V | |
| C575 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C576 | 1-130-478-00 | MYLAR | 0.0039uF | 5% | 50V | |
| C577 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C578 | 1-136-160-00 | FILM | 0.039uF | 5% | 50V | |
| C579 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C580 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C581 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C582 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C583 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C584 | 1-163-098-00 | CERAMIC CHIP | 16PF | 5% | 50V | |
| C585 | 1-163-098-00 | CERAMIC CHIP | 16PF | 5% | 50V | |
| C586 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C587 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C588 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C589 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C590 | 1-135-159-21 | TANTALUM CHIP | 10uF | 10% | 16V | |
| C591 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C592 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C593 | 1-163-023-00 | CERAMIC CHIP | 0.015uF | 5% | 50V | |
| C594 | 1-163-019-00 | CERAMIC CHIP | 0.0068uF | 10% | 50V | |
| C595 | 1-126-153-11 | ELECT | 22uF | 20% | 6.3V | |
| C596 | 1-135-159-21 | TANTALUM CHIP | 10uF | 10% | 16V | |
| C597 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C598 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C599 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C600 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C601 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C602 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C603 | 1-163-227-11 | CERAMIC CHIP | 10PF | 5% | 50V | |
| C604 | 1-163-227-11 | CERAMIC CHIP | 10PF | 5% | 50V | |
| C605 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C606 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C607 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C608 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C609 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C610 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| C611 | 1-163-227-11 | CERAMIC CHIP | 10P | 5% | 50V | |
| C612 | 1-163-227-11 | CERAMIC CHIP | 10PF | 5% | 50V | |
| C613 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C614 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C615 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V | |
| C616 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V | |
| C617 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C618 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C619 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C620 | 1-124-242-00 | ELECT | 33uF | 20% | 25V | |
| C621 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C622 | 1-131-388-00 | TANTALUM | 68uF | 10% | 6.3V | |
| C623 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C624 | 1-124-589-11 | ELECT | 47uF | 20% | 16V | |
| C625 | 1-163-109-00 | CERAMIC CHIP | 47PF | 5% | 50V | |
| C626 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C627 | 1-126-154-11 | ELECT | 47uF | 20% | 6.3V | |
| C628 | 1-163-109-00 | CERAMIC CHIP | 47PF | 5% | 50V | |
| C629 | 1-135-159-21 | TANTALUM CHIP | 10uF | 10% | 16V | |
| C630 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C631 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C632 | 1-135-161-21 | TANTALUM CHIP | 22uF | 10% | 6.3V | |
| C633 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C634 | 1-135-161-21 | TANTALUM CHIP | 22uF | 10% | 6.3V | |
| C635 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C636 | 1-135-091-00 | TANTALUM CHIP | 1uF | 20% | 16V | |
| C637 | 1-135-161-21 | TANTALUM CHIP | 22uF | 10% | 6.3V | |
| C638 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C639 | 1-135-176-21 | TANTALUM CHIP | 0.68uF | 10% | 20V | |
| C640 | 1-135-176-21 | TANTALUM CHIP | 0.68uF | 10% | 20V | |
| C641 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C642 | 1-162-568-11 | CERAMIC CHIP | 0.33uF | 10% | 16V | |
| C643 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C644 | 1-163-097-00 | CERAMIC CHIP | 15PF | 5% | 50V | |
| C645 | 1-135-159-21 | TANTALUM CHIP | 10uF | 10% | 16V | |
| C646 | 1-163-099-00 | CERAMIC CHIP | 18PF | 5% | 50V | |
| C647 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C648 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C651 | 1-163-227-11 | CERAMIC CHIP | 10PF | 5% | 50V | |
| C652 | 1-163-227-11 | CERAMIC CHIP | 10PF | 5% | 50V | |
| C661 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C662 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C681 | 1-163-105-00 | CERAMIC CHIP | 33PF | 5% | 50V | |
| C682 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C683 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C684 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C685 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C686 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C801 | 1-161-744-00 | CERAMIC | 0.01uF | | 250V | |
| C802 | 1-124-472-11 | ELECT | 470uF | 20% | 10V | |
| C803 | 1-126-596-11 | ELECT | 330uF | 20% | 6.3V | |
| C804 | 1-126-596-11 | ELECT | 330uF | 20% | 6.3V | |
| C805 | 1-124-120-11 | ELECT | 220uF | 20% | 25V | |
| C806 | 1-124-120-11 | ELECT | 220uF | 20% | 25V | |
| C807 | 1-126-176-11 | ELECT | 220uF | 20% | 10V | |
| C808 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C809 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C810 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C811 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C813 | 1-163-125-00 | CERAMIC CHIP | 220PF | 5% | 50V | |
| | | 〈 CONNECTOR 〉 | | | | |
| CN501 | * 1-506-986-11 | PIN, CONNECTOR (PC BOARD) 4P | | | | |
| CN502 | * 1-565-571-11 | PIN, CONNECTOR (PC BOARD) 5P | | | | |
| CN503 | 1-506-467-11 | CONNECTOR 2P, MALE | | | | |
| CN505 | 1-506-467-11 | CONNECTOR 2P, MALE | | | | |
| CN506 | * 1-565-568-21 | PIN, CONNECTOR (PC BOARD) 2P | | | | |
| CN507 | * 1-565-568-11 | PIN, CONNECTOR (PC BOARD) 2P | | | | |
| CN508 | * 1-565-571-11 | PIN, CONNECTOR (PC BOARD) 5P | | | | |
| CN509 | * 1-565-574-11 | PIN, CONNECTOR (PC BOARD) 8P | | | | |
| CN510 | * 1-565-578-11 | PIN, CONNECTOR (PC BOARD) 12P | | | | |
| CN511 | 1-506-471-11 | CONNECTOR 6P, MALE | | | | |
| | | 〈 DIODE 〉 | | | | |
| D501 | 8-719-403-94 | DIODE MA160 | | | | |
| D502 | 8-719-940-45 | DIODE DWA010 | | | | |
| D504 | 8-719-400-18 | DIODE MA152WK | | | | |
| D506 | 8-719-400-18 | DIODE MA152WK | | | | |
| D507 | 8-719-940-45 | DIODE DWA010 | | | | |
| D508 | 8-719-800-76 | DIODE 1SS226 | | | | |
| D509 | 8-719-915-30 | DIODE, VAR CAP FC53M | | | | |
| D510 | 8-719-800-76 | DIODE 1SS226 | | | | |
| D801 | 8-719-105-45 | DIODE RD3.3M-B1 | | | | |
| D802 | 8-719-105-91 | DIODE RD5.6M-B2 | | | | |

# MAIN

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| | | 〈 FUSE 〉 | |
| F801 ⚠ | 1-532-779-11 | FUSE, MICRO (SECONDARY) | |
| | | 〈 IC 〉 | |
| IC501 | 8-759-983-69 | IC LM358PS1 | |
| IC502 | 8-759-140-60 | IC uPD6335G | |
| IC503 | 8-759-908-81 | IC MB3763PF | |
| IC504 | 8-759-983-69 | IC LM358PS | |
| IC506 | 8-759-983-74 | IC LM324NS | |
| IC507 | 8-759-100-93 | IC uPC393G2 | |
| IC508 | 8-759-909-45 | IC CX20084 | |
| IC509 | 8-759-908-15 | IC TL431CLP | |
| IC510 | 8-759-983-74 | IC LM324NS | |
| IC511 | 8-759-100-93 | IC uPC393G2 | |
| IC512 | 8-759-300-71 | IC HD14053BFP | |
| IC513 | 8-759-983-69 | IC LM358PS | |
| IC514 | 8-759-983-74 | IC LM324NS | |
| IC515 | 8-752-017-40 | IC CX20174 | |
| IC516 | 8-759-983-74 | IC LM324NS | |
| IC517 | 8-759-100-93 | IC uPC393G2 | |
| IC518 | 8-752-030-63 | IC CXA1046M | |
| IC519 | 8-759-983-08 | IC MB673468U | |
| IC520 | 8-759-946-81 | IC CXD1052Q-Z | |
| IC521 | 8-759-983-74 | IC LM324NS | |
| IC522 | 8-759-983-69 | IC LM358PS | |
| IC523 | 8-759-154-43 | IC uPD75112GF | |
| IC524 | 8-759-970-59 | IC TLC272CPS | |
| IC525 | 8-759-970-59 | IC TLC272CPS | |
| IC526 | 8-752-331-00 | IC CXK5864BM-12L | |
| IC527 | 8-752-331-00 | IC CXK5864BM-12L | |
| IC528 | 8-759-933-85 | IC CXD1009Q | |
| IC529 | 8-759-933-84 | IC CXD1008Q | |
| IC530 | 8-759-947-57 | IC CXD1136Q | |
| IC531 | 8-759-946-53 | IC CXD1147Q | |
| IC532 | 8-759-927-29 | IC SN74HCU04ANS | |
| IC533 | 8-759-209-90 | IC TC4S71F | |
| IC535 | 8-759-300-71 | IC HD14053BFP | |
| IC536 | 8-759-931-43 | IC SN74LS624NS | |
| IC537 | 8-752-306-51 | IC CX23065A | |
| IC538 | 8-759-710-79 | IC NJM2107F | |
| IC539 | 8-759-209-90 | IC TC4S71F | |
| IC540 | 8-759-031-84 | IC SC7S04F | |
| IC801 | 1-464-899-11 | IC CONVERTER UNIT, DC-DC | |
| IC802 | 8-759-937-54 | IC S-81250HG-RD-S | |
| | | 〈 COIL 〉 | |
| L502 | 1-410-521-11 | INDUCTOR 100uH | |
| L503 | 1-410-521-11 | INDUCTOR 100uH | |
| L504 | 1-410-509-11 | INDUCTOR 10uH | |
| L505 | 1-406-264-11 | COIL (OSC) | |
| L506 | 1-410-509-11 | INDUCTOR 10uH | |
| L507 | 1-421-665-11 | COIL | |
| L508 | 1-410-509-11 | INDUCTOR 10uH | |
| | | 〈 TRANSISTOR 〉 | |
| Q501 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q502 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | |
| Q503 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q504 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q505 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | |
| Q506 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q507 | 8-729-141-48 | TRANSISTOR 2SB624-BV345 | |
| Q508 | 8-729-159-64 | TRANSISTOR 2SD596-DV4 | |
| Q509 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | |
| Q510 | 8-729-140-72 | TRANSISTOR 2SB798-DLDK | |
| Q511 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q512 | 8-729-140-75 | TRANSISTOR 2SD999-CLCK | |
| Q513 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | |
| Q514 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | |
| Q515 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | |
| Q516 | 8-729-114-47 | TRANSISTOR 2SB962Z-Q | |
| Q517 | 8-729-114-47 | TRANSISTOR 2SB962Z-Q | |
| Q518 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | |
| Q519 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q520 | 8-729-900-98 | TRANSISTOR DTC143TK | |
| Q521 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q522 | 8-729-900-98 | TRANSISTOR DTC143TK | |
| Q523 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q524 | 8-729-903-82 | TRANSISTOR FMW2 | |
| Q525 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q526 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q527 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q528 | 8-729-901-01 | TRANSISTOR DTC144EK | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| Q529 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | | |
| Q530 | 8-729-111-14 | TRANSISTOR 2SA1385-Z-L | | | |
| Q531 | 8-729-903-82 | TRANSISTOR FMW2 | | | |
| Q532 | 8-729-903-82 | TRANSISTOR FMW2 | | | |
| Q533 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q534 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q535 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q536 | 8-729-901-05 | TRANSISTOR DTA124EK | | | |
| Q537 | 8-729-901-05 | TRANSISTOR DTA124EK | | | |
| Q538 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q539 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q540 | 8-729-114-47 | TRANSISTOR 2SB962Z-Q | | | |
| Q801 | 8-729-120-53 | TRANSISTOR 2SJ132-Z | | | |
| Q802 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q803 | 8-729-120-53 | TRANSISTOR 2SJ132-Z | | | |
| Q804 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q805 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| Q806 | 8-729-230-49 | TRANSISTOR 2SC2712L-YG | | | |
| | | 〈 RESISTOR 〉 | | | |
| R501 | 1-216-661-11 | METAL CHIP | 2.7K | 0.5% 1/10W | |
| R502 | 1-216-680-11 | METAL CHIP | 16K | 0.5% 1/10W | |
| R503 | 1-216-687-11 | METAL CHIP | 33K | 0.5% 1/10W | |
| R504 | 1-216-669-11 | METAL CHIP | 5.6K | 0.5% 1/10W | |
| R505 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R506 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R507 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R508 | 1-216-069-00 | METAL CHIP | 6.8K | 5% 1/10W | |
| R509 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R510 | 1-216-069-00 | METAL CHIP | 6.8K | 5% 1/10W | |
| R511 | 1-216-081-00 | METAL CHIP | 22K | 5% 1/10W | |
| R512 | 1-216-049-00 | METAL CHIP | 1K | 5% 1/10W | |
| R513 | 1-216-027-00 | METAL CHIP | 120 | 5% 1/10W | |
| R514 | 1-218-232-91 | METAL GLAZE | 4.7 | 10% 1/2W | |
| R515 | 1-216-031-00 | METAL CHIP | 180 | 5% 1/10W | |
| R516 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R517 | 1-216-027-00 | METAL CHIP | 120 | 5% 1/10W | |
| R518 | 1-216-031-00 | METAL CHIP | 180 | 5% 1/10W | |
| R519 | 1-216-041-00 | METAL CHIP | 470 | 5% 1/10W | |
| R520 | 1-216-041-00 | METAL CHIP | 470 | 5% 1/10W | |
| R521 | 1-216-081-00 | METAL CHIP | 22K | 5% 1/10W | |
| R522 | 1-216-049-00 | METAL CHIP | 1K | 5% 1/10W | |
| R523 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R524 | 1-216-073-00 | METAL CHIP | 10K | 5% 1/10W | |
| R525 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R526 | 1-216-029-00 | METAL CHIP | 150 | 5% 1/10W | |
| R527 | 1-216-025-00 | METAL CHIP | 100 | 5% 1/10W | |
| R528 | 1-216-025-00 | METAL CHIP | 100 | 5% 1/10W | |
| R533 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R534 | 1-216-073-00 | METAL CHIP | 10K | 5% 1/10W | |
| R535 | 1-216-025-00 | METAL CHIP | 100 | 5% 1/10W | |
| R536 | 1-216-025-00 | METAL CHIP | 100 | 5% 1/10W | |
| R537 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R538 | 1-216-029-00 | METAL CHIP | 150 | 5% 1/10W | |
| R542 | 1-216-029-00 | METAL CHIP | 150 | 5% 1/10W | |
| R543 | 1-216-085-00 | METAL CHIP | 33K | 5% 1/10W | |
| R544 | 1-216-085-00 | METAL CHIP | 33K | 5% 1/10W | |
| R545 | 1-216-079-00 | METAL CHIP | 18K | 5% 1/10W | |
| R546 | 1-216-079-00 | METAL CHIP | 18K | 5% 1/10W | |
| R547 | 1-216-077-00 | METAL CHIP | 15K | 5% 1/10W | |
| R548 | 1-216-077-00 | METAL CHIP | 15K | 5% 1/10W | |
| R549 | 1-216-117-00 | METAL CHIP | 680K | 5% 1/10W | |
| R550 | 1-216-025-00 | METAL CHIP | 100 | 5% 1/10W | |
| R551 | 1-216-117-00 | METAL CHIP | 680K | 5% 1/10W | |
| R552 | 1-216-077-00 | METAL CHIP | 15K | 5% 1/10W | |
| R553 | 1-216-109-00 | METAL CHIP | 330K | 5% 1/10W | |
| R554 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R555 | 1-216-081-00 | METAL CHIP | 22K | 5% 1/10W | |
| R556 | 1-216-689-11 | METAL CHIP | 39K | 0.5% 1/10W | |
| R557 | 1-216-085-00 | METAL CHIP | 33K | 5% 1/10W | |
| R558 | 1-216-073-00 | METAL CHIP | 10K | 5% 1/10W | |
| R561 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R562 | 1-216-037-00 | METAL CHIP | 330 | 5% 1/10W | |
| R563 | 1-216-081-00 | METAL CHIP | 22K | 5% 1/10W | |
| R564 | 1-216-033-00 | METAL CHIP | 220 | 5% 1/10W | |
| R565 | 1-216-069-00 | METAL CHIP | 6.8K | 5% 1/10W | |
| R566 | 1-216-069-00 | METAL CHIP | 6.8K | 5% 1/10W | |
| R567 | 1-216-114-00 | METAL GLAZE | 510K | 5% 1/10W | |
| R568 | 1-216-073-00 | METAL CHIP | 10K | 5% 1/10W | |
| R569 | 1-216-017-00 | METAL CHIP | 47 | 5% 1/10W | |
| R570 | 1-216-065-00 | METAL CHIP | 4.7K | 5% 1/10W | |
| R571 | 1-216-025-00 | METAL CHIP | 100 | 5% 1/10W | |
| R572 | 1-216-045-00 | METAL CHIP | 680 | 5% 1/10W | |

# MAIN

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R573 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R574 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R575 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W | |
| R576 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R577 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R578 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R579 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R580 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R581 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R582 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R583 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R584 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R585 | 1-216-121-00 | METAL CHIP | 1M | 5% | 1/10W | |
| R586 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R587 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R588 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R589 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W | |
| R590 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W | |
| R591 | 1-216-066-00 | METAL CHIP | 5.1K | 5% | 1/10W | |
| R592 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R593 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W | |
| R594 | 1-216-691-11 | METAL CHIP | 47K | 0.5% | 1/10W | |
| R595 | 1-216-696-11 | METAL CHIP | 75K | 0.5% | 1/10W | |
| R596 | 1-216-672-11 | METAL CHIP | 7.5K | 0.5% | 1/10W | |
| R597 | 1-216-684-11 | METAL CHIP | 24K | 0.5% | 1/10W | |
| R598 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W | |
| R599 | 1-216-093-00 | METAL CHIP | 68K | 5% | 1/10W | |
| R600 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R601 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R602 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R603 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R604 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R605 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W | |
| R606 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W | |
| R607 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R608 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W | |
| R609 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R610 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R611 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R612 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W | |
| R613 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R614 | 1-216-063-00 | METAL CHIP | 3.9K | 5% | 1/10W | |

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R615 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R616 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W | |
| R617 | 1-216-064-00 | METAL CHIP | 4.3K | 5% | 1/10W | |
| R618 | 1-216-075-00 | METAL CHIP | 12K | 5% | 1/10W | |
| R619 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R620 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R621 | 1-216-093-00 | METAL CHIP | 68K | 5% | 1/10W | |
| R622 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W | |
| R623 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W | |
| R624 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R625 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R626 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R627 | 1-218-231-11 | METAL GLAZE | 1 | 10% | 1/2W | |
| R628 | 1-216-069-00 | METAL CHIP | 6.8K | 5% | 1/10W | |
| R629 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R630 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R631 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R632 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R633 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R634 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R635 | 1-216-093-00 | METAL CHIP | 68K | 5% | 1/10W | |
| R636 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R637 | 1-216-059-00 | METAL CHIP | 2.7K | 5% | 1/10W | |
| R638 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R639 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R640 | 1-216-075-00 | METAL CHIP | 12K | 5% | 1/10W | |
| R641 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R642 | 1-216-069-00 | METAL CHIP | 6.8K | 5% | 1/10W | |
| R643 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R644 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R645 | 1-216-074-00 | METAL GLAZE | 11K | 5% | 1/10W | |
| R646 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R647 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R648 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W | |
| R649 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R650 | 1-216-059-00 | METAL CHIP | 2.7K | 5% | 1/10W | |
| R651 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R652 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R653 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W | |
| R654 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W | |
| R655 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R656 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R657 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W | |
| R658 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R659 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W | |
| R660 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R661 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R662 | 1-216-121-00 | METAL CHIP | 1M | 5% | 1/10W | |
| R663 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R664 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R665 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R666 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R667 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R668 | 1-216-105-00 | METAL CHIP | 220K | 5% | 1/10W | |
| R669 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W | |
| R670 | 1-216-114-00 | METAL GLAZE | 510K | 5% | 1/10W | |
| R671 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R672 | 1-216-093-00 | METAL CHIP | 68K | 5% | 1/10W | |
| R673 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R674 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W | |
| R675 | 1-216-071-00 | METAL CHIP | 8.2K | 5% | 1/10W | |
| R676 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W | |
| R677 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R678 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R679 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R680 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R683 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R684 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R685 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R686 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R687 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R688 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R689 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W | |
| R690 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R691 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R692 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R693 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W | |
| R694 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W | |
| R695 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R696 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R697 | 1-216-098-00 | METAL CHIP | 110K | 5% | 1/10W | |
| R698 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R699 | 1-216-687-11 | METAL CHIP | 33K | 0.5% | 1/10W | |
| R700 | 1-216-687-11 | METAL CHIP | 33K | 0.5% | 1/10W | |
| R701 | 1-216-063-00 | METAL CHIP | 3.9K | 5% | 1/10W | |
| R702 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R703 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R704 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R705 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R706 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R707 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R708 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R709 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R710 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R711 | 1-216-032-00 | METAL CHIP | 200 | 5% | 1/10W | |
| R712 | 1-216-032-00 | METAL CHIP | 200 | 5% | 1/10W | |
| R713 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R714 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R715 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R716 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R717 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R718 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R719 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R720 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R721 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R722 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R723 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R725 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R726 | 1-216-129-00 | METAL CHIP | 2.2M | 5% | 1/10W | |
| R727 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R728 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R729 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R731 | 1-216-064-00 | METAL CHIP | 4.3K | 5% | 1/10W | |
| R732 | 1-216-084-00 | METAL GLAZE | 30K | 5% | 1/10W | |
| R733 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W | |
| R734 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R735 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W | |
| R736 | 1-216-115-00 | METAL CHIP | 560K | 5% | 1/10W | |
| R737 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W | |
| R738 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W | |
| R739 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W | |
| R740 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W | |
| R741 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W | |
| R742 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R743 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |

# MAIN | MD (A) | PB VOL

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R744 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R745 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R746 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W | |
| R748 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W | |
| R749 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W | |
| R750 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W | |
| R751 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R752 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R753 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W | |
| R754 | 1-216-009-00 | METAL CHIP | 22 | 5% | 1/10W | |
| R755 | 1-216-059-00 | METAL CHIP | 2.7K | 5% | 1/10W | |
| R756 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W | |
| R757 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R758 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R759 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R760 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W | |
| R781 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R782 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R783 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R784 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R785 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R786 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R787 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R788 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R789 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W | |
| R790 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R791 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R801 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R802 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R803 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R804 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R805 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R806 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R807 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R808 | 1-216-629-11 | METAL CHIP | 120 | 0.5% | 1/10W | |
| R809 | 1-216-641-11 | METAL CHIP | 390 | 0.5% | 1/10W | |
| R810 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R811 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W | |
| R812 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R813 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R814 | 1-216-031-00 | METAL CHIP | 180 | 5% | 1/10W | |
| R815 | 1-216-198-00 | METAL CHIP | 1K | 5% | 1/8W | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| | | ⟨ VARIABLE RESISTOR ⟩ | |
| RV501 | 1-237-038-11 | RES, ADJ, CERMET 50K | |
| RV502 | 1-237-038-11 | RES, ADJ, CERMET 50K | |
| RV503 | 1-237-035-11 | RES, ADJ, CERMET 5K | |
| RV504 | 1-237-037-11 | RES, ADJ, CERMET 20K | |
| RV505 | 1-237-037-11 | RES, ADJ, CERMET 20K | |
| RV506 | 1-237-036-11 | RES, ADJ, CERMET 10K | |
| RV507 | 1-237-037-11 | RES, ADJ, CERMET 20K | |
| RV508 | 1-237-038-11 | RES, ADJ, CERMET 50K | |
| RV509 | 1-237-036-11 | RES, ADJ, CERMET 10K | |
| | | ⟨ CONNECTOR ⟩ | |
| W501 | 1-565-194-11 | HOUSING, CONNECTOR 20P | |
| W502 | 1-565-056-11 | HOUSING, CONNECTOR 12P | |
| W503 | 1-568-157-11 | HOUSING, CONNECTOR 16P | |
| W504 | 1-565-055-11 | HOUSING, CONNECTOR 10P | |
| W505 | 1-566-997-11 | HOUSING, CONNECTOR (PC BOARD) | |
| W506 | 1-565-056-11 | HOUSING, CONNECTOR 12P | |
| | | ⟨ CRYSTAL ⟩ | |
| X501 | 1-577-460-11 | VIBRATOR, CRYSTAL (4.190MHz) | |
| X502 | 1-567-966-11 | VIBRATOR, CRYSTAL (18.816MHz) | |
| X503 | 1-567-965-11 | VIBRATOR, CRYSTAL (22.579MHz) | |
| X504 | 1-577-571-11 | VIBRATOR, CRYSTAL (24.584MHz) | |
| ********** | | | |
| | 1-625-241-11 | MD (A) FLEXIBLE BOARD | |
| | | ********** | |
| ********** | | | |
| | 1-630-671-11 | PB VOL FLEXIBLE BOARD | |
| | | ********** | |
| | | ⟨ VARIABLE RESISTOR ⟩ | |
| RV302 | 1-238-614-11 | RES, VAR, CARBON 20K/20K (VOLUME) | |
| ********** | | | |

# REC VOL | SYSCON.SUB | SYSTEM CONTROL

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| | * 1-630-607-11 | REC VOL BOARD | | | | |
| | | ********** | | | | |
| | | 〈 VARIABLE RESISTOR 〉 | | | | |
| RV301 | 1-238-615-11 | RES, VAR, CARBON 20Kx4 (REC LEVEL) | | | | |
| ********** | | | | | | |
| | 1-630-612-11 | SYSCON. SUB FLEXIBLE BOARD | | | | |
| | | ********** | | | | |
| | | 〈 EL 〉 | | | | |
| EL1 | 1-519-548-11 | ELEMENT, EL | | | | |
| | | 〈 IC 〉 | | | | |
| IC1 | 8-759-105-68 | IC uPD7225G-00 | | | | |
| | | 〈 DISPLAY PANEL 〉 | | | | |
| ND1 | 1-808-725-11 | DISPLAY PANEL, LIQUID CRYSTAL | | | | |
| | | 〈 RESISTOR 〉 | | | | |
| R1 | 1-216-113-00 | METAL CHIP | 470K | 5% | 1/10W | |
| R2 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R3 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R4 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| ********** | | | | | | |
| | * A-3016-085-A | SYSTEM CONTROL BOARD, COMPLETE | | | | |
| | | ********** | | | | |
| | 3-345-089-01 | SPACER (EL) | | | | |
| | 3-831-441-11 | CUSHION (B) | | | | |
| | | 〈 CAPACITOR 〉 | | | | |
| C1 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C2 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C3 | 1-135-089-21 | TANTALUM CHIP | 6.8uF | 10% | 20V | |
| C4 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C5 | 1-126-154-11 | ELECT | 47uF | 20% | 6.3V | |
| C6 | 1-124-584-00 | ELECT | 100uF | 20% | 10V | |
| C7 | 1-135-149-21 | TANTALUM CHIP | 2.2uF | 20% | 10V | |
| C8 | 1-126-163-11 | ELECT | 4.7uF | 20% | 50V | |

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| C9 | 1-163-098-00 | CERAMIC CHIP | 16PF | 5% | 50V | |
| C10 | 1-163-098-00 | CERAMIC CHIP | 16PF | 5% | 50V | |
| C11 | 1-163-100-00 | CERAMIC CHIP | 20PF | 5% | 50V | |
| C12 | 1-163-100-00 | CERAMIC CHIP | 20PF | 5% | 50V | |
| C13 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C14 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C15 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C16 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V | |
| C17 | 1-163-077-00 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C18 | 1-163-809-11 | CERAMIC CHIP | 0.047uF | 10% | 25V | |
| | | 〈 CONNECTOR 〉 | | | | |
| CN1 | * 1-565-583-11 | PIN, CONNECTOR (PC BOARD) 3P | | | | |
| CN2 | * 1-565-586-11 | PIN, CONNECTOR (PC BOARD) 6P | | | | |
| | | 〈 DIODE 〉 | | | | |
| D1 | 8-719-975-46 | DIODE RB471E | | | | |
| D2 | 8-719-800-76 | DIODE 1SS226 | | | | |
| D3 | 8-719-800-76 | DIODE 1SS226 | | | | |
| | | 〈 IC 〉 | | | | |
| IC2 | 8-759-988-10 | IC RH5RA53A | | | | |
| IC3 | 8-759-988-04 | IC RH5VA25A | | | | |
| IC4 | 8-759-154-42 | IC uPD75312GF | | | | |
| IC5 | 8-759-970-58 | IC BU3508K | | | | |
| IC6 | 8-759-971-44 | IC MSM74H010GS-K | | | | |
| IC7 | 8-759-030-74 | IC SC14S66F | | | | |
| IC8 | 8-759-979-65 | IC RH5VA43AA | | | | |
| IC9 | 8-759-030-74 | IC SC14S66F | | | | |
| | | 〈 TRANSISTOR 〉 | | | | |
| Q1 | 8-729-100-67 | TRANSISTOR 2SC1623-L7 | | | | |
| Q2 | 8-729-805-62 | TRANSISTOR 2SA1502 | | | | |
| Q3 | 8-729-901-46 | TRANSISTOR DTA114YK | | | | |
| Q4 | 8-729-901-46 | TRANSISTOR DTA114YK | | | | |
| | | 〈 RESISTOR 〉 | | | | |
| R5 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R6 | 1-216-023-00 | METAL CHIP | 82 | 5% | 1/10W | |
| R7 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R8 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W | |
| R9 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |

# SYSTEM CONTROL | TENSION REGULATOR

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R10 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R11 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R12 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R13 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R14 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R15 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R16 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R17 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R18 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R19 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R20 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R21 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R22 | 1-216-071-00 | METAL CHIP | 8.2K | 5% | 1/10W | |
| R23 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R24 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R25 | 1-216-105-00 | METAL CHIP | 220K | 5% | 1/10W | |
| R26 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W | |
| R27 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R28 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R29 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R30 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R31 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R32 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R33 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| | | 〈 SWITCH 〉 | | | | |
| S1 | 1-571-365-11 | SWITCH, SLIDE (LIMITER) | | | | |
| S2 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (SCAN) | | | | |
| S3 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (▶▶I) | | | | |
| S4 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (I◀◀) | | | | |
| S5 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (CLOCK) | | | | |
| S6 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (RECORDED TIME) | | | | |
| S7 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (COUNTER) | | | | |
| S8 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (LIGHT) | | | | |
| S9 | 1-571-381-21 | SWITCH, TACTIL (REFLOW TYPE) (COUNTER REST) | | | | |
| | | 〈 TRANSFORMER 〉 | | | | |
| T1 | 1-406-342-11 | TRANSFORMER, OSC | | | | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| | | 〈 CONNECTOR 〉 | |
| W1 | 1-568-238-11 | CONNECTOR, FPC (1.0MM)(ZIF) 16P | |
| W2 | 1-568-235-21 | CONNECTOR, FPC (1.0MM)(ZIF) 10P | |
| W3 | 1-568-164-11 | CONNECTOR, FPC (1.0MM)(ZIF) 8P | |
| W4 | 1-565-771-11 | CONNECTOR, FPC (1.0MM)(ZIF) 12P | |
| W5 | 1-568-238-11 | CONNECTOR, FPC (1.0MM)(ZIF) 16P | |
| W6 | 1-568-238-11 | CONNECTOR, FPC (1.0MM)(ZIF) 16P | |
| | | 〈 CRYSTAL 〉 | |
| X1 | 1-577-460-11 | VIBRATOR, CRYSTAL (4.190MHz) | |
| X2 | 1-567-098-00 | CRYSTAL (32.768KHz) | |
| ********** | | | |
| | | TENSION REGULATOR BOARD | |
| | | ********** | |
| | | 〈 DIODE 〉 | |
| H001 | 8-719-800-11 | DIODE THS105 | |
| ********** | | | |
| | | MISCELLANEOUS | |
| | | ********** | |
| 177 | 1-466-142-11 | MODULATOR, RF | |
| 254 | 8-835-206-01 | MOTOR, DC BHF-2803A | |
| 255 | 1-464-724-11 | ENCODER, ROTARY | |
| 257 | 8-848-509-11 | DRUM ASSY DOH-01E | |
| 260 | 1-808-281-31 | SENSOR | |
| 261 | 8-835-367-01 | MOTOR, DC U-21 | |
| RV301 | 1-238-615-11 | RES, VER, CARBON 20KX4 (REC LEVEL) | |
| RV302 | 1-238-614-11 | RES, VAR, CARBON 20K/20K (VOLUME) | |
| SP901 | 1-503-866-11 | SPEAKER | |
| EL1 | 1-519-548-11 | ELEMENT, EL | |
| ND1 | 1-808-725-12 | DISPLAY PANEL, LIQUID CRYSTAL | |
| J901 | 1-509-184-51 | CONNECTOR (RECEPTACLE) 3P (MIC/LINE IN) | |
| J902 | 1-509-184-51 | CONNECTOR (RECEPTACLE) 3P (MIC/LINE IN) | |
| J903 | 1-565-108-11 | JACK, LARGE TYPE (HEADPHONES) | |
| J904 | 1-574-771-11 | CORD, CONNECTION (REMOTE/DIGITAL I/O) | |
| CNJ901 | 1-507-655-00 | PIN JACK (LINE OUT) | |
| S801 | 1-570-641-11 | SWITCH, LEAF (BATTERY DET) | |
| S901 | 1-570-771-11 | SWITCH (HOLDER LOCK/CASSETTE CONTROL) | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| S902 | 1-570-771-11 | SWITCH (HOLDER LOCK/CASSETTE CONTROL) | |
| S903 | 1-570-883-21 | SWITCH, PUSH (2 KEY) (REC DET/SOFT DET) | |
| S904 | 1-570-771-11 | SWITCH (LIMIT DET) | |
| S905 | 1-570-883-11 | SWITCH, PUSH (2 KEY) (1.5 SPEED DET/CASSETTE DET) | |
| PH901 | 1-807-698-11 | PHOTO SENSER | |
| PH902 | 1-807-698-11 | PHOTO SENSER | |
| H001 | 8-719-800-11 | DIODE THS105 | |

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ACCESSORY & PACKING MATERIAL
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|---|---|---|---|
| | 1-465-018-11 | ADAPTOR, BATTERY CHARGE | |
| | 1-465-182-11 | REMOTE COMMANDER (RMT-D10P) | |
| | 1-574-775-11 | CABLE (WITH CONNECTOR) | |
| | 2-526-211-01 | ADAPTOR (SAD-44), STAND SCREW | |
| | 2-526-213-01 | ADAPTOR (SAD-45), STAND SCREW | |
| | 3-345-036-01 | BELT, CARRYING | |
| * | 3-345-063-01 | CUSHION (UPPER) | |
| * | 3-345-064-01 | CUSHION (LOWER) | |
| * | 3-345-065-01 | CARTON, ACCESSORY | |
| | 3-354-217-01 | CASE, CARRYING | |
| | 3-370-501-01 | MANUAL, OPERATION (ENGLISH, FRENCH, GERMAN) | |
| * | 3-370-639-01 | INDIVIDUAL CARTON | |
| | 3-704-282-01 | BAG, PROTECTION | |
| * | 4-603-369-02 | LABEL (CLASS A), FCC (US MODEL) | |
| | A-3005-439-A | MANUAL ASSY, INSTRUCTION | |

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HARDWARE LIST
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| | | | |
|---|---|---|---|
| #1 | 7-627-553-18 | SCREW, PRECISION +P 2X2 | |
| #2 | 7-621-772-10 | SCREW, PRECISION +B 2X4 | |
| #3 | 7-627-553-68 | SCREW, PRECISION +P 2X6 | |
| #4 | 7-627-551-28 | SCREW, PRECISION +P 1.4X2.5 | |
| #5 | 7-627-554-28 | SCREW, PRECISION +P 2X5 TYPE3 | |
| #6 | 7-621-255-25 | SCREW, PRECISION +P 2X4 | |
| #7 | 7-627-553-48 | SCREW, PRECISION +P 2X4 | |
| #8 | 7-624-102-04 | STOP RING 1.5, TYPE -E | |
| #9 | 7-621-772-18 | SCREW, PRECISION +B 2X4 | |
| #10 | 7-627-553-98 | SCREW, PRECISION +P 2X8 | |
| #11 | 7-621-772-80 | SCREW, PRECISION +B 2X16 | |
| #12 | 7-621-260-22 | SCREW, PRECISION +P 2.6X20 | |
| #13 | 7-621-772-08 | SCREW, PRECISION +B 2X3 | |
| #14 | 7-623-505-01 | LUG, 2 | |
| #15 | 7-627-850-17 | SCREW, PRECISION +P 1.4X2.5 | |
| #16 | 7-621-283-00 | SCREW, PRECISION +P 2X5 | |
| #17 | 7-627-552-47 | SCREW, PRECISION +P 1.7X4 | |
| #18 | 7-627-551-17 | SCREW, PRECISION +P 1.4X2 | |
| #19 | 7-621-772-20 | SCREW, PRECISION +B 2X5 | |
| #20 | 7-628-253-00 | SCREW, PRECISION +PS 2X4 | |
| #21 | 7-627-553-27 | SCREW, PRECISION +P 2X2.5 | |
| #22 | 7-627-551-87 | SCREW, PRECISION +P 1.4X1.8 | |
| #23 | 7-627-552-27 | SCREW, PRECISION +P 1.7X2 | |
| #24 | 7-627-552-18 | SCREW, PRECISION +P 1.7X1.6 | |
| #25 | 7-627-551-27 | SCREW, PRECISION +P 1.4X2.5 | |
| #26 | 7-627-854-07 | SCREW, PRECISION +P 2X2.5 TYPE3 | |

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